VEAM

# CIR Series

ITT

ENGINEERED FOR LIFE

ITT Corporation is a diversified leading manufacturer of highly engineered critical components and customized technology solutions for industrial end-markets in energy infrastructure, electronics, aerospace and transportation. Building on its heritage of innovation, ITT partners with its customers to deliver enduring solutions to the key industries that underpin our modern way of life. Founded in 1920, ITT is headquartered in White Plains, N.Y., with employees in more than 30 countries and sales from a total of 125 countries which generated a 2011 revenue of $2.1 billion.

Our award-winning connector portfolio continues to be an industry innovator, offering a reliable and cost effective range of interconnect solutions with the brands of Cannon, VEAM and BIW Connector Systems. Continuous investment in technology and research & development have enabled ITT to provide new, innovative
products and solutions to markets including:

- Automotive
- Computer & Consumer Electronics
- Industrial/Instrumentation
- Military & Aerospace
- Oil & Gas
- Telecommunications/Wireless Handheld Devices
- Transportation

When you specify a Cannon, VEAM or BIW Connector Systems connector, you can rely on products that are designed, developed, and manufactured to the highest quality and reliability standards. This tradition of excellence is based on ITT's corporate culture of operating its businesses under the principles of Six Sigma. At ITT, Six Sigma is not just a quality philosophy but a complete corporate culture that drives the entire business. Our Value Based Management and Value Based Product Development systems are two cornerstones that allow for the development of both leadership and product engineering principles, ensuring our industry leading products are developed to the accepted market driven lead times. These principles have allowed ITT to become the market leader in all of our business portfolios.

**Six Sigma Manufacturing**

ITT operates manufacturing facilities in the United States, Germany, Italy, Mexico, China, Japan and the UK, all of which have particular product area strengths allowing ITT to offer a truly global footprint to our customers. Our facilities are world class and accommodate full vertical integration utilizing the latest manufacturing technologies including: manufacturing cells, Kanban pull systems, and automated electrical, mechanical, and optical test and inspection equipment. The combination of our manufacturing strength and our advanced manufacturing facilities allows ITT to offer products at market driven prices. Our capabilities, especially in robotics, computerized precision tooling,

Kaizen Project Management, Six Sigma tools, and testing, give ITT the most optimized global manufacturing footprint in the interconnect industry.

**The Custom Difference**

As the industry leader in harsh environment interconnect applications, ITT's world class engineering teams will work directly with our customers to design and develop cost effective solutions for their applications. In many cases we may modify one of our standard designs to ensure a highly reliable solution where timing is critical. Yet, in those cases where a complete custom interconnect solution is required, ITT will work with our customer's Engineers to design an interconnect solution which will be cost effective yet highly reliable. Our Engineering teams will provide a thorough systems and mechanical analysis of any proposed solution. These analyses provide our customers with sophisticated electrical signal and mechanical characterizations to determine the best solution for their application.

**RoHS Compliance Information**

ITT has implemented a strict parts control plan for all ITT electronics plants worldwide that allows the Cannon, VEAM, and BIW Connector Systems product portfolios to meet the requirements of the European Union Directive 2002/95/EC better know as the Reduction of Hazardous Substances initiative. As appropriate, specific Cannon, VEAM, and BIW Connector Systems products may be ordered with an R prefix number which insures our customers will receive RoHS compliant parts for their commercial electronics applications and equipment. Since most RoHS hazardous substances center around specific metal plating and lead solder coatings, ITT's products for RoHS compliance are available in the following plating finishes: electroless nickel, stainless steel, anodize over aluminum and gold plating. It should be noted that gold plating would be recommended as the replacement for tin-lead solder when ordering board mount connectors.

Specifications and dimensions subject to change
Dimensions shown in mm.



ITT

| | |
|---|---|
| Introduction | Page 6 |
| General Specification | Page 7 |
| Part Number Generation | Page 10 |
| Electrical Data | Page 12 |
| Mechanical Data | Page 13 |
| Inserts by Contact Quantity | Page 26 - 31 |
| Inserts by Shell Sizes | Page 32 - 34 |
| Insert Rotation - Alternate Positions | Page 35 - 36 |
| Contact Selection Based on Wire Diameter | Page 14 - 15 |
| Contact Dimensions | Page 16 - 21 |
| Coaxial Contacts | Page 22 - 25 |
| PCB Terminations | Page 70 - 73 |
| Insert Arrangements Pictorials | Page 37 - 50 |
| Connector Selection | Page 74 - 75 |
| Class Overview | Page 76 - 86 |
| Reduction Sleeve and Hole Plugs | Page 193 - 194 |
| Connector Mounting Options | Page 195 - 197 |
| Additional CIR Options (CIR020R/00, CIR064PP, CIR05) | Page 198 |
| Accessories (caps, gaskets, clamps, bushings) | Page 199 - 202 |
| Tools | Page 204 - 209 |
| Additional Connector Series | Page 3 - 5 & 210, 211, 213 |


While the information in this publication is belived to be accurate and reliable, all data presented is subject to change without notice.
VEAM disclaims responsibility for any damages resulting from application or any incompleteness or inaccuracies presented.
Consult factory for specific information on the latest design specifications.

Offering the broadest selection of transportation interconnect solutions, ITT is the one stop source for design, development, manufacturing, and testing.

ITT offers Cannon, VEAM, and BIW Connector Systems product lines designed specifically for transit applications. These product lines come in a large style of shell sizes and contact arrangements to meet the most demanding applications, both electrical and optical. Inserts to meet low smoke/zero halogen and RoHS requirements are also available. ITT provides complete harnessing solutions and junction boxes.

As the industry leader in harsh environment interconnect applications, ITT's world class engineering teams will work directly with our customers to design and develop cost effective solutions for their applications. In many cases we may modify one of our standard designs to ensure a reliable solution where timing is critical. Yet, in those cases where a complete custom interconnect solution is required, ITT will work with our customer's Engineers to design an interconnect solution which will be cost effective yet highly reliable.

### *VEAM VBN*

Circular connectors with rigid insert according to NF F 61030 regulations. Field configurable, allows easy and quick harnessing. Suitable both for signal and power.

### *VEAM CIR High Temperature Connector*

The new European standards series CEN/TS 45545 for fire rail safety regulations requires a connector able to withstand for 15 minutes when exposed to the ISO 834-1 heating curve (max Temperature 800°C). The VEAM CIR High Temp connector meets this standard.

#### *Applications*

- Critical control signals
- Fire resistant applications

### *Cannon CA Bayonet*

VG/CA-Bayonet signal and power connectors provide superior performance in extreme environmental conditions. They offer exceptional sealing against the ingress of fluids and will withstand the effects of high vibration. In accordance to VG95234.

#### *Applications*

- Control panel connections
- Intervehicle applications
- Communications equipment
- CCTV equipment

### *VEAM CIR and FRCIR Standard*

Multipurpose bayonet circular connectors. 1 up to 159 solder or crimp contacts. Both for signal and power. In accordance to VG95234.

### *Applications*

- Control switchboard connections
- Control panel connections

### *VEAM FRMGCIR*

Multipurpose bayonet circular connectors, completely covered with fire-resistant rubber.

### *Applications*

- Power connections
- Signal connections
- Intervehicle applications

### *VEAM FRCIR-WCML Series*

Multipole connector with group shielding contact for several cables. IP67, waterproof.

### *Applications*

- Intervehicle connections
- Power and signal connections

### *VEAM FRCIR for databus and power*

FRCIR for databus and power applications.

### *Applications*

- Intervehicle applications
- Databus applications

### *VEAM FRCIR/VBN connector series with grounding system*

Grounding system to ground the connector shell.

### *Applications*

- Air conditioning
- Lighting
- Converters

## Optical Products

### *Multi-channel Fiber Optic Connectors*

Typical applications in automation and control systems.

### *Applications*

- Intervehicle applications
- CCTV equipment
- Entertainment

### *VEAM PCB Optical Connections*

PCB version optical connection system according to DIN41612 STYLE E, 16 channels. Active contacts are removable for quick and easy repair.

### *Applications*

- Power conversion control panel

Specifications and dimensions subject to change
Dimensions shown in mm.

## Rack and Panel

### *Cannon Trident Multiway*

The Multiway range is an extremely reliable and robust series of rack and panel connectors. The design is based on the requirements of MIL-C-28748 and will accept any of the Trident signal or coax contacts. It is available in 6 arrangements ranging from 14 to 75 ways, together with a wide range of accessories and mounting hardware.

### *Applications*

- Trackside signalling
- Test equipment

### *VEAM Rack and Panel connector*

Push pull connector for power and signal applications. Typical applications in power conversion panels.

### *Applications*

- Power conversion
- Power connections

## Junction Boxes

### *Junction Box*

Junction box with CIR Connectors.

### *Applications*

- Controls
- Tilting systems
- CCTV equipment

### *Junction Boxes for Optical Connections*

### *Applications*

- Controls
- Tilting systems
- CCTV equipment

## Signal Connectors

### *VEAM FRCIR M12*

4 ethernet lines connector M12 type for harsh applications used in signal networks.

### *Applications*

- Intervehicle connections
- Databus applications

### *VEAM FRCIR for MVB lines*

FRCIR for MVB databus with shielding.

### *Applications*

- Intervehicle connections
- Databus applications

### *VEAM FRCIR RJ45*

FRCIR with 2 RJ45 connector for ethernet applications.

#### *Applications*

- Intervehicle connections
- Databus applications

### *VEAM D Sub WCML Series Backshell*

Backshell to connect the shield in D Sub series.

#### *Applications*

- Internal signal lines
- Databus applications

### *Cannon Combo D Sub*

Combo D, D*M connector series offers the advantages of an industry standard shield I/O interconnect, with the flexibility of a customized special, designed for any application.

#### *Applications*

- Control systems
- Trackside signalling
- Communications equipment

### *Hermetic Connector*

High performance through-wall hermetic connector (vacuum: 6x10 x –3 bar Max. Ermeticity: <10 x-7 m bar l/sec. temperature range: -40°C +90° C)

#### *Applications*

- GTO Control
- Power Conversion

## Power Connectors

### *VEAM FRCIR 290*

Circular bayonet connector for both power and data connections. IP67, waterproof.

#### *Applications*

- Intervehicle power connections
- Motor supply

### *VEAM VPLABB Series*

Single pole power connector up to 660A for traction applications.

#### *Applications*

- High current connections
- Power conversion

## Introducing the most versatile

# multipin connector in the world...

The **VEAM CIR Series** is the most versatile electrical, optical and pneumatic multipin connector available today. Designed originally for the hostile environment of Transit applications, CIR has earned acceptance in Military, Commercial, Medical, Geophysical, Entertainment, Nuclear, Aerospace. Ground support and comparable areas requiring nearly non-destructible cable or wire terminations.

The electrical design parameters of CIR were based on MIL-DTL-5015. However, its unique positive lock, quick disconnect coupling surpasses the environmental requirements of this military specification. To enhance service life, CIR connectors feature stainless steel anti-wear rings at the critical point of the receptacle coupling ramps. The CIR design has been adopted by NATO as the "standard connector for Ground Fighting Vehicles" and is used extensively in U.S. and European military programs: Based on standard VG 95234.

### COAXIAL CIR
Coaxial contacts for CIR arrangements accept most popular RG cables.

### FIBEROPTIC CIR
CIR connectors are available with single or multiple fiber termini.

### FUEL RESISTANT CIR
CIR inserts/grommets can be molded in Fluoroelastomer (Viton*) for superior resistance to fuel oils, solvents and elevated temperatures.

### HERMETIC CIR
CIR connectors can be supplied with glass to metal seals in lieu of elastomeric inserts. A wide choice of wire terminations are available.

### HIGH VOLTAGE
High Voltage CIR connectors are available. For voltage ratings consult factory.

### TWINAXIAL, TRIAXIAL CIR
Size 4 or 8 contact cavities will accept these versatile contacts.

### RFI/EMI CIR
Unique grounding fingers on plug connectors provide superior plug to receptacle (360°) shield integrity.

### THERMOCOUPLE CIR
CIR connectors are available with various thermocouple material contacts including; chromel, alumel, copper, constantan and iron.

### PNEUMATIC CIR
Various insert arrangements with size 4, 8, or 12 cavities will accept pneumatic contacts to pass liquid or air - at pressures up to 110 PSI. Flow valves available.

### FILTERED CIR
Available with Tubular or Planar filter networks.

*Trademark-DuPont

1. Quick coupling and uncoupling 120° coupling nut rotation.

2. High shock **50 g's** and vibration resistance **20 g's** - Lockwires not required.

3. No coupling threads to gall or bind due to wear or contamination

4. Audible, Visual, and Tactile indication of full coupling.

5. **Waterproof to 10 meters** (33 ft.) 12 Hours (14.7 PSI)

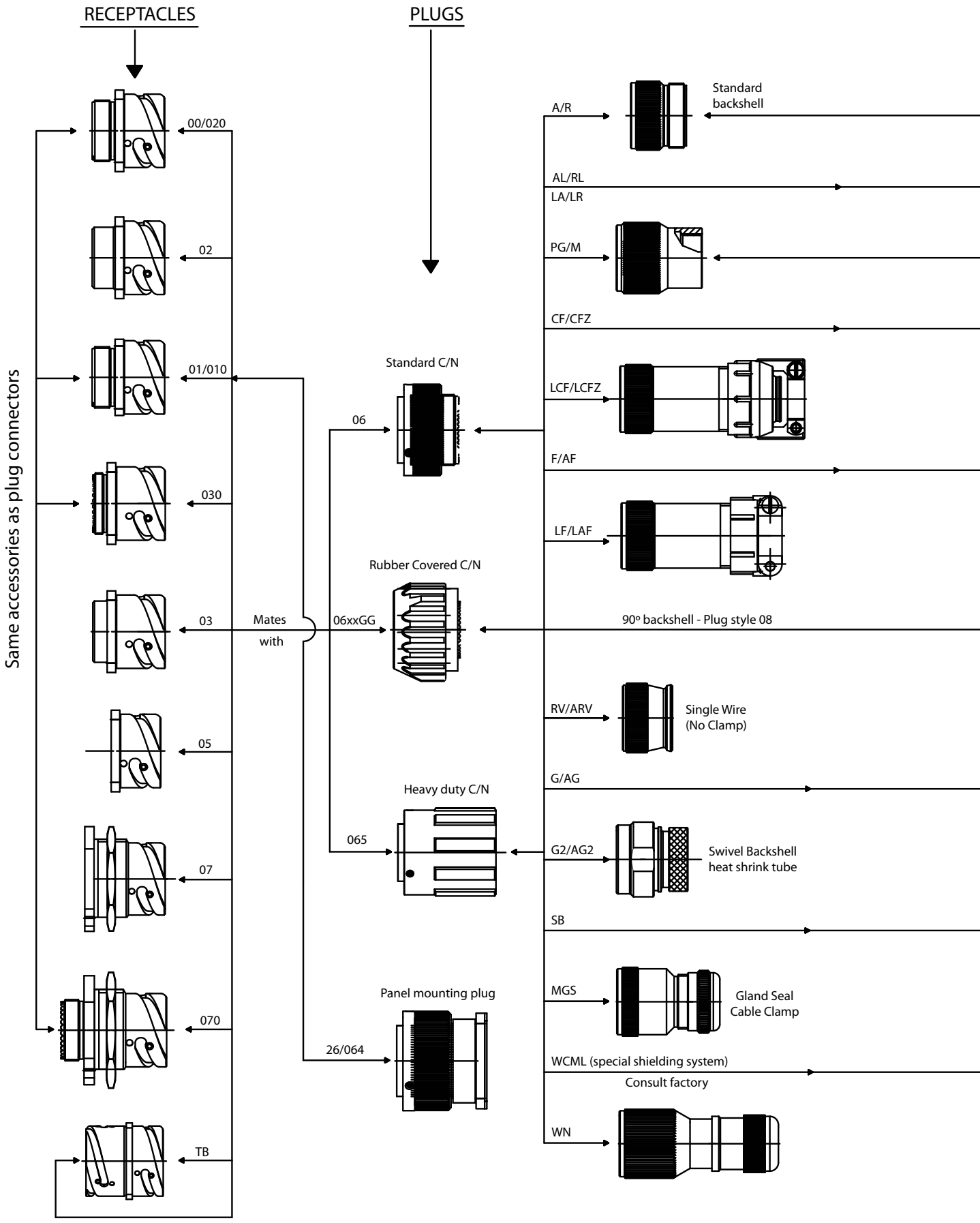
6. **2,000 couplings min.**

7. Elastomer temperature ranges:
   - 55° C. to + 125° C. Neoprene
   - 55° C. to + 200° C. Silicone
   - 25° C. to + 200° C. Viton*
   - 40° C. to + 125° C. FR (flame retardant)

## General Specifications

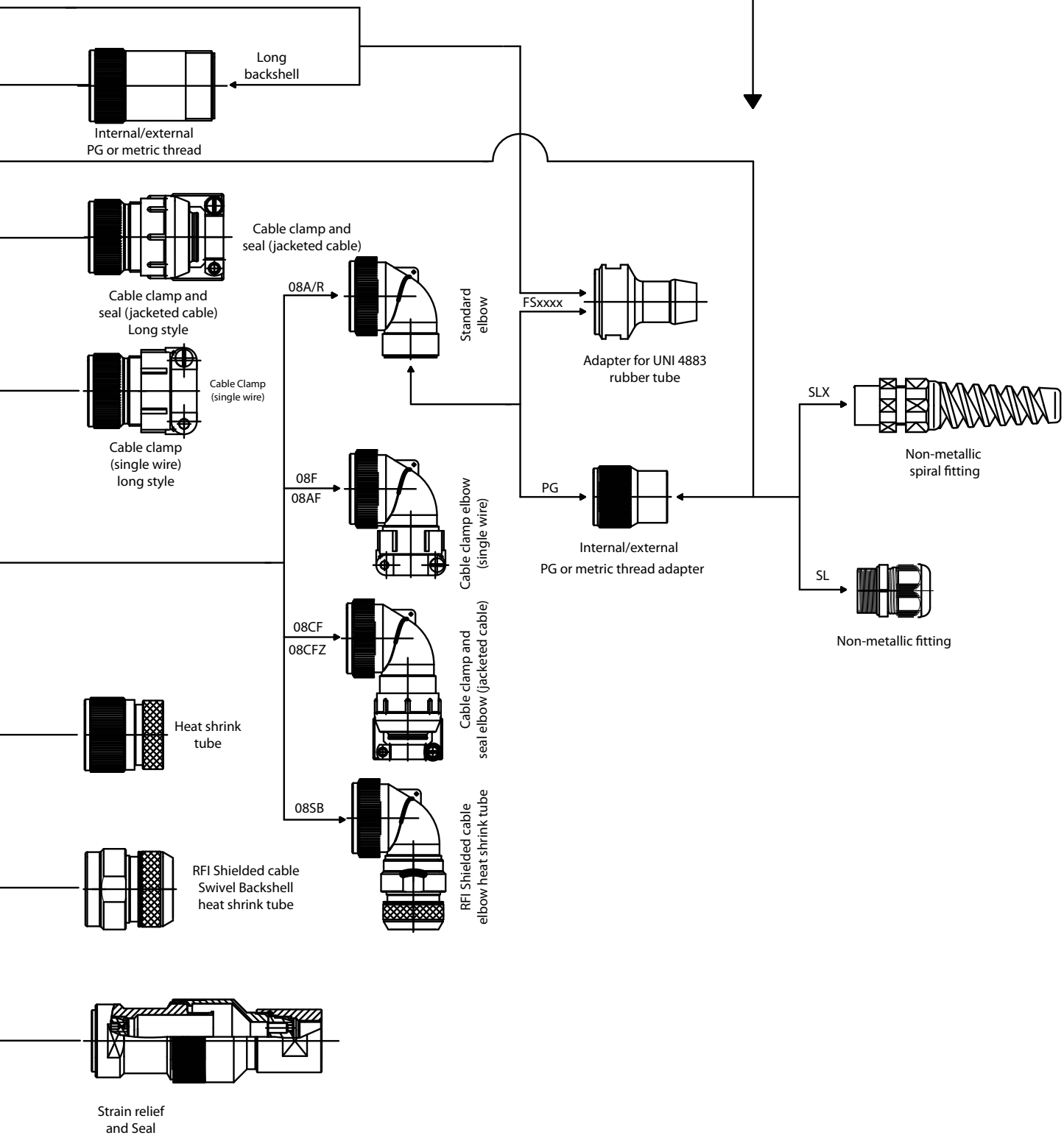
| | |
|---|---|
| **Shell** | **Material:** Aluminum alloy. Options include stainless steel, bronze and plastic composite. |
| | **Finish:** Hard Black Anodize (T89), Non-cadmium (Green-T100), (Black-T108) Electroless Nickel (T29), Cadmium-olive drab (T3), Epoxyurethane Varnish (T39). |
| | **For other** materials and finishes, consult our Customer Service Department. |
| **Insert** | **Material:** Polychloroprene (Neoprene). Options include silicone, fluorocarbon (Viton*) and FR (Flame Retardant) rubber. |
| **Contacts** | **Material:** Copper alloy or thermocouple alloys. |
| | **Finish:** Silver (T9), gold (standard - T12, heavy -T112) and Rhodium plating. |
| **VEAM CIR Series Connectors** are produced in accordance with NATO Standard VG95234, which is based on MIL-DTL-5015 for physical size, layout and environmental requirements. | |
| ** Trademark-Dupont* | |

Note: CIR connectors are available with cadmium free and lead free materials.

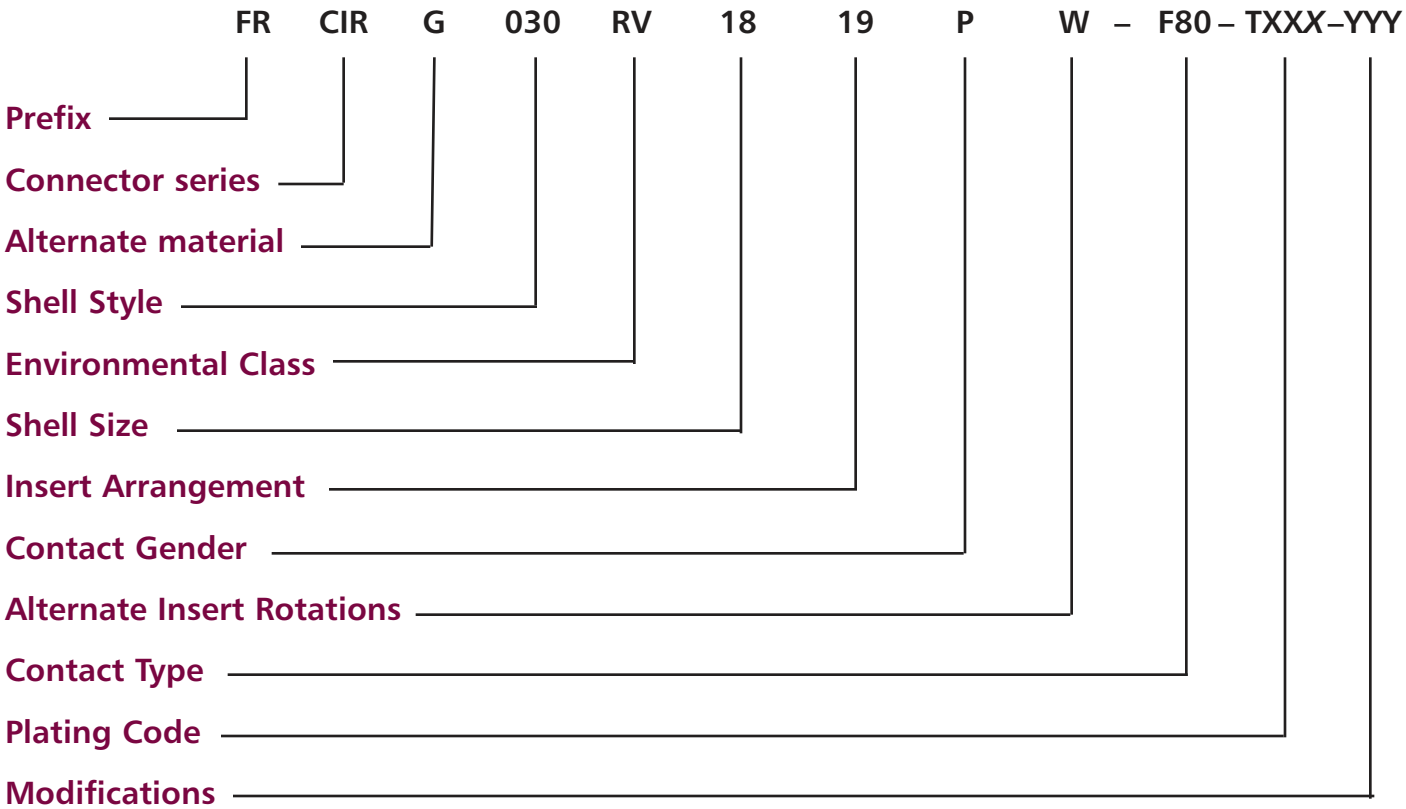

RECEPTACLES
PLUGS
Same accessories as plug connectors
00/020
02
01/010
030
03
05
07
070
TB
Mates with
Standard C/N
06
Rubber Covered C/N
06xxGG
Heavy duty C/N
065
Panel mounting plug
26/064
A/R
Standard backshell
AL/RL
LA/LR
PG/M
CF/CFZ
LCF/LCFZ
F/AF
LF/LAF
90° backshell - Plug style 08
RV/ARV
Single Wire (No Clamp)
G/AG
G2/AG2
Swivel Backshell heat shrink tube
SB
MGS
Gland Seal Cable Clamp
WCML (special shielding system)
Consult factory
WN

BACKSHELL AND ACCESSORIES

ADAPTERS AND CABLE CLAMPS



# Standard Part Number Generation - Line Configurator




**PREFIX**
FR.....Flame retardant materials

**CONNECTOR SERIES**
CIR....Bayonet coupling

**ALTERNATE MATERIAL**
G.....Plug with RFI grounding
V.....Fluoroelastomers
P..... Plastic connector shells
SP..... Plastic receptacle shell without ramp rings

**SHELL STYLE**
01/010.....In-line receptacle-Round flange with flats
020/00.....Front panel mount receptacle, rear thread
02.....Front panel mount receptacle, no rear thread
03.....Rear panel mount receptacle, no rear thread
030.....Rear panel mount receptacle, rear thread
038.....Rear/Front mount receptacle with 90° backshells
05.....Dummy receptacle
07.....Single hole mount jamnut receptacle, no read thread
070.....Single hole mount jamnut receptacle, read thread
078.....Single hole mount jamnut receptacle with 90° backshells
TB.....Thru-bulkhead receptacle
06.....Straight plug connector
065.....Straight plug connector with heavy duty coupling nut
26/064PP....Panel plug
08.....90 degree plug connector

**ENVIRONMENTAL CLASS**
Different classes are based on the type of backshell, sealing capability and accessories. Refer to pages 53 - 63.

**SHELL SIZE**
10SL, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36, 40

**INSERT ARRANGEMENT**
Defined by the quantity and size of the contacts.
For the layouts refer to pages 37-50
For the service rating and other electrical data refer to page 12

**CONTACT GENDER**
P.....Male contacts
S.....Female contacts
PS.....Thru-bulkhead contacts (female-male)
PP - Thru-bulkhead contacts (male-male)

**ALTERNATE INSERT POSITION**
W, X, Y, Z, Q - Refer to page 23

**CONTACT TYPE**
F80.....Crimp for AWG wire (used in F80 insert)
CR.....Crimp for metric wire (used in metric insert)
CR1.....Crimp for AWG wire (used in metric insert)
PC.....Pneumatic contacts
VO.....Contacts not supplied
NO SUFFIX.....Solder (standard class)

**PLATING CODE OF SHELLS**
T29.....Electroless Nickel
T39.....Black epoxyurhetanic varnish
T89.....Black hard anodize
T100.....Zinc/cobalt Ecogreen
T108.....Zinc/cobalt Ecoblack
Other plating available. Please consult the factory.

**MODIFICATIONS**
VO.....Supplied less contacts
Consult factory

# Connector and Contact Ratings

## Insert Arrangement Service Rating

| Service Rating | Operating Voltage DC (at sea level) | Operating Voltage AC (at sea level) |
|---|---|---|
| I | 250 V | 200 V |
| A | 700 V | 500 V |
| D | 1250 V | 900 V |
| E | 1750 V | 1250 V |
| B | 2450 V | 1750 V |
| C | 4200 V | 3000 V |

## Contact Rating

| Contact Size | | Maximum Current | Rated and Test Current | Potential Drop Millivolts Maximum |
|---|---|---|---|---|
| F80-CR1 | CR | • | | * |
| 20 | 10 | 7.5 A | 7.5 A | 83 mV |
| 18 | - | 10 A | 7.5 A | 83 mV |
| 16-16S | 15-15S | 22 A | 13 A | 74 mV |
| 12 | 25 | 41 A | 23 A | 63 mV |
| 8 | 60-100 | 73 A | 46 A | 65 mV |
| 4 | 160 | 135 A | 80 A | 58 mV |
| 0 | 500 | 245 A | 150 A | 53 mV |
| 4/0 | | 350 A | 225 A | 53 mV |

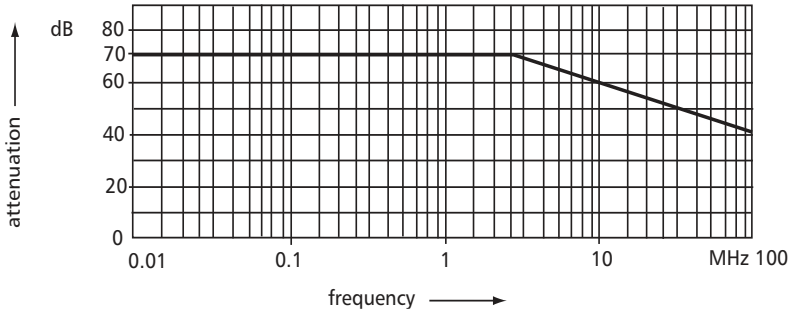
*• Applicable for short time*
** According to MIL-C-39029 D. Test with nickel-plated wire.*

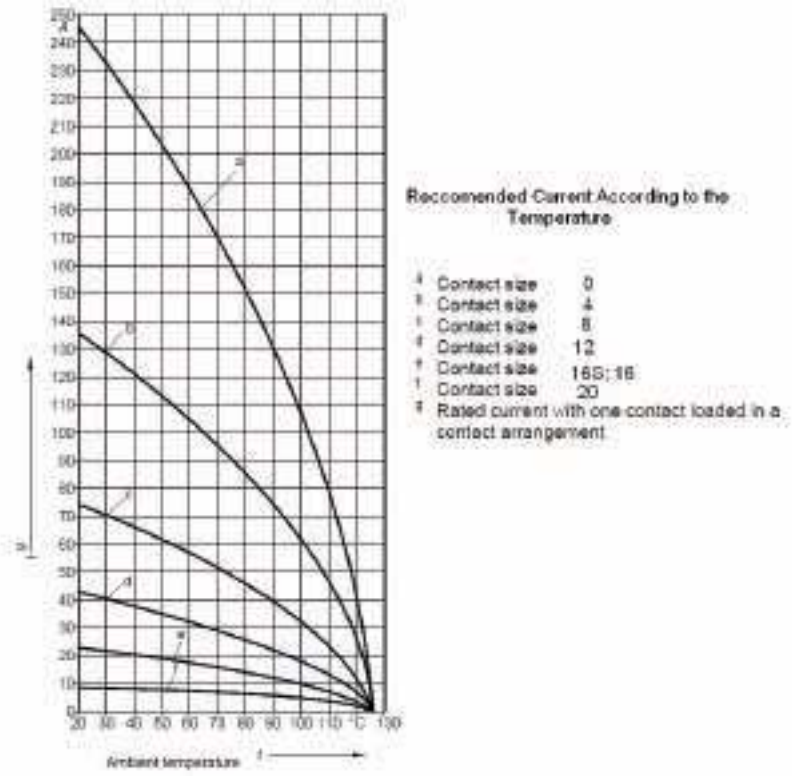
## Dielectric Strength (Standard at Sea Level Conditions)

| Service Rating | Minimum Flashover ac rms | Test Voltage ac rms * |
|---|---|---|
| I | 1.400 V | 1.000 V |
| A | 2.800 V | 2.000 V |
| D | 3.600 V | 2.800 V |
| E | 4.500 V | 3.500 V |
| B | 5.700 V | 4.500 V |
| C | 8.500 V | 7.000 V |

** According to MIL-DTL-5015 the connectors do not show any signs of breakdown when the test voltage indicated in the table is applied for one minute between the two closet contacts and between the shell and any of the contacts to the shells*

Shielding Characteristics



## Backshell / Clamp Torque Forces

| Recommended Torque Forces Connector Backshells/Clamps | | | |
|---|---|---|---|
| **Size** | **In. lb Min/Max** | **Size** | **In. lb Min/Max** |
| 10SL | 26/31 | 22 | 87/104 |
| 14S | 44/49 | 24 | 96/130 |
| 16 | 57/66 | 28 | 121/165 |
| 16S | 57/66 | 32 | 130/182 |
| 18 | 61/69 | 36 | 165/235 |
| 20 | 69/87 | 40 | 182/347 |

## Contact Disengaging Force Meets or Exceeds MIL-C-39029

| Contact Size F80 | Ounces | Newtons |
|---|---|---|
| 18-20 | .7 | .19 |
| 16-16S | 2.0 | .56 |
| 12 | 3.0 | .83 |
| 8 | 5.0 | 1.39 |
| 4 | 10.0 | 2.78 |
| 0 | 15.0 | 4.17 |
| 4/0* | 15.0 | 4.17 |

**Not included in MIL-Spec*

| Contact Size | | Min. Disengaging Force |
|---|---|---|
| CR | CR1 and F80 | N (Newton) |
| 10 | 20 | 0,3 |
| 15-15S | 16-16S | 1 |
| 25 | 12 | 1,5 |
| 60-100 | 8 | 3 |
| 160 | 4 | 4 |
| 500 | 0 | 8,5 |

*Separating force per contact*
*The corresponding separating force has to be measured according to VG95319, part 2, test no. 5.7 using the required test gauge.*

## CIR Coupling - Torque Values per VG95234

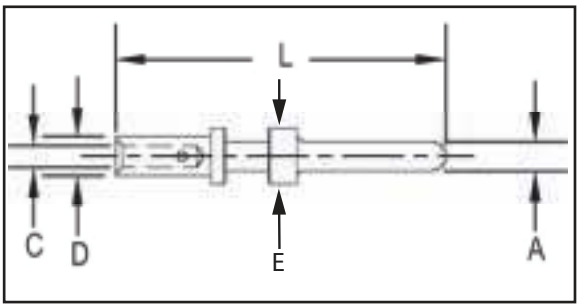
The allowable coupling torques have to be tested under full bundle conditions of the connectors to VG95319, part 2 test no. 5.8.2

| Shell Size | Allowable coupling torque closing and opening Nm max. | Opening Nm min. |
|---|---|---|
| 10SL | 1,7 | 0,15 |
| 14S | 3,6 | 0,35 |
| 16S | 5,5 | 0,46 |
| 16 | 5,5 | 0,46 |
| 18 | 8 | 0,58 |
| 20 | 9 | 0,7 |
| 22 | 11 | 0,8 |
| 24 | 14 | 0,8 |
| 28 | 17 | 0,92 |
| 32 | 19 | 1,03 |
| 36 | 23 | 1,03 |
| 40 * | 24 | 1,5 |

*** Size *40* it is not required from *VG 95234***

| Pin Contact Part Number | Socket Contact Part Number | Contact Size | Wire Size (AWG or mm²) | Approximate Wire Diameter mm | Approximate Wire Diameter inch | Crimp Bucket I.D mm | Crimp Bucket I.D inch |
|---|---|---|---|---|---|---|---|
| 46730-20P | 46731 | 20 | 20-26 | 0.96-1.02 | .038 -.040 | 1.3 | .051 |
| 46740P | 46740S | 18 | 18-20 | 1.16-1.27 | .046-.050 | 1.3 | .051 |
| 46740-15P | 46740-15S | 18 | 20-22 | 0.76-1.02 | .030-.040 | 1.2 | .047 |
| 46740-22P | 46740-22S | 18 | 16 | 1.45-1.52 | .057-.060 | 1.7 | .067 |
| 27911 | 27961 | 16S | 16-18 | 1.45-1.52 | .057-.060 | 1.7 | .067 |
| 27911-13 | 27961-13 | 16S | 20-24 | 0.61-1.02 | .024-.040 | 1.3 | .051 |
| 27911-15 | 27961-15 | 16S | 18-20 | 0.96-1.27 | .038-.050 | 1.5 | .059 |
| 27911-20 | 27961-20 | 16S | 14-16 | 1.45-1.9 | .057-.075 | 2.0 | .079 |
| 27911-26 | 27961-26 | 16S | 12-14 | 2.18 | .086 | 2.5 | .098 |
| 27913 | 27963 | 16 | 16-18 | 1.45-1.52 | .057-.060 | 1.7 | .067 |
| 27913-08 | 27963-08 | 16 | 24-26 | 0.61-0.63 | .024-.025 | 0.85 | .033 |
| 27913-12 | 27963-12 | 16 | 20-22 | 0.76-1.02 | .030-.040 | 1.2 | .047 |
| 27913-13 | 27963-13 | 16 | 20-24 | 0.61-1.02 | .024-.040 | 1.3 | .051 |
| 27913-15 | 27963-15 | 16 | 18-20 | 0.96-1.27 | .038-.050 | 1.5 | .059 |
| 27913-20 | 27963-20 | 16 | 14-16 | 1.45-1.9 | .057-.075 | 2.0 | .079 |
| 27913-26 | 27963-26 | 16 | 12-14 | 2.18 | .086 | 2.5 | .098 |
| 27914-8 | 27964-8 | 12 | 8 | 3.5-4.37 | .138-.172 | 4.55 | .179 |
| 27914-12 | 27964-12 | 12 | 20-22 | 0.76-1.02 | .030-.040 | 1.2 | .047 |
| 27914-20 | 27964-20 | 12 | 14-18 | 1.16-1.9 | .046-.075 | 2.0 | .079 |
| 27914-22 | 27964-22 | 12 | 2.5mm² | 1.78 | .070 | 2.2 | .087 |
| 27914-26 | 27964-26 | 12 | 12-14 | 2.18 | .086 | 2.5 | .098 |
| 27914-30 | 27964-30 | 12 | 4mm² | 2.26 | .089 | 3.0 | .118 |
| 27914-38 | 27964-38 | 12 | 10 | 3.2 | .126 | 3.6 | .142 |
| 27915 | 27935 | 8 | 8 | 3.5-4.37 | .138-.172 | 4.55 | .179 |
| 27915-20 | 27935-20 | 8 | 14-18 | 1.16-1.9 | .046-.075 | 2.0 | .079 |
| 27915-26 | 27935-26 | 8 | 12-14 | 2.18 | .086 | 2.5 | .098 |
| 27915-26-62 | 27935-26-62 | 8 | 12-14 | 2.18 | .086 | 2.5 | .098 |
| 27915-30 | 27935-30 | 8 | 4mm² | 2.26 | .089 | 3.0 | .118 |
| 27915-38 | 27935-38 | 8 | 10 | 3.2 | .126 | 3.6 | .142 |
| 27915-58 | 27935-58 | 8 | 6 | 4.83-5.41 | .190-.213 | 5.8 | .228 |

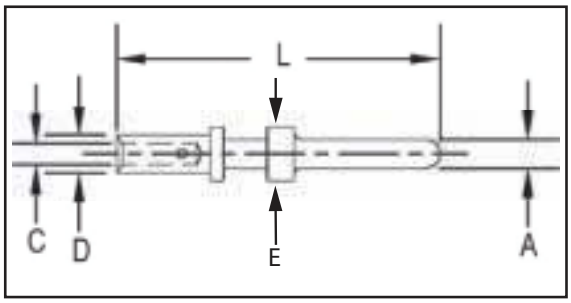
| Pin Contact Part Number | Socket Contact Part Number | Contact Size | Wire Size (AWG or mm²) | Approximate Wire Diameter | | Crimp Bucket I.D | |
|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch |
| 27916 | 27936 | 4 | 4 | 4.83-6.86 | .190-.270 | 7.2 | .283 |
| 27916-22 | 27936-22 | 4 | 2.5mm² | 1.78 | .070 | 2.2 | .087 |
| 27916-62 | 27936-62 | 4 | 16mm² | 5.76-6.02 | .227-.237 | 6.2 | .244 |
| 27917 | 27937 | 0 | 53mm² | 10.5-11 | .413-.433 | 11.5 | .453 |
| 27917V | 27937V | 0 | 0 (1/0) | 10.5-11 | .413-.433 | 11.5 | .453 |
| 27917-45 | 27937-45 | 0 | 8 | 3.5-4.37 | .138-.172 | 4.55 | .179 |
| 27917-50 | 27937-50 | 0 | 10mm² | 4.16-4.86 | .164-.191 | 5.0 | .197 |
| 27917-62 | 27937-62 | 0 | 16mm² | 6-6.17 | .236-.243 | 6.2 | .244 |
| 27917-78 | 27937-78 | 0 | 25mm² | 7.48 | .294 | 7.8 | .307 |
| 27917-90 | 27937-90 | 0 | 35mm² | 8.76 | .345 | 9.0 | .354 |
| 27917-107 | 27937-107 | 0 | 50mm² | 10.57 | .416 | 10.7 | .421 |
| 46646-0 | 47647-0 | 0 | 4 | 6.6-6.86 | .260-.270 | 7.2 | .283 |
| 47107-90 | 47114-90 | 4/0 | 2 | 8.13-8.53 | .320-.336 | 9.0 | .354 |
| 47107-115 | 47114-115 | 4/0 | 1/0 (0) | 10.5-11 | .413-.433 | 11.5 | .453 |
| 47107-135 | 47114-135 | 4/0 | 2/0 | 11.0-12.9 | .433-.508 | 13.5 | .531 |
| 47107-144 | 47114-144 | 4/0 | 70mm² | 12.48 | .491 | 14.4 | .567 |
| 47107-155 | 47114-155 | 4/0 | 95mm² | 14.6 | .575 | 15.5 | .610 |
| 47107-165 | 47114-165 | 4/0 | 4/0 | 14.7-15.0 | .579-.591 | 16.5 | .650 |




Male
(Pin)

*When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size mm² | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 46730-20P | 20 | 20-26 | 0,15 / 0,6 | 1.0 | .04 | 1.3 | .05 | 1.93 | .07 | 2.0 | .08 | 27.0 | 1.06 |
| 46730-20P-1 | 20S | 20-26 | 0,15 / 0,6 | 1.0 | .04 | 1.3 | .05 | 1.93 | .07 | 2.0 | .08 | 22.8 | .9 |
| 46740P | 18 | 18 | 0,15 / 0,6 | 1.42 | .05 | 1.3 | .05 | 1.93 | .07 | 2.2 | .086 | 29.6 | 1.17 |
| 46740-15P | 18 | 20-22 | 0,3 / 0,6 | 1.42 | .05 | 1.2 | .05 | 1.93 | .07 | 2.2 | .086 | 29.6 | 1.17 |
| 46740-22P | 18 | 16-18 | 1 / 1,5 | 1.42 | .05 | 1.7 | .07 | 2.6 | .10 | 2.6 | .10 | 31.75 | 1.25 |
| 27911 | 16S | 16-18 | 1 / 1,5 | 1.58 | .06 | 1.7 | .07 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-12 | 16S | - | 0,15 / 0,75 | 1.58 | .06 | 1.2 | .05 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-13 | 16S | 20-26 | 0,15 / 0,6 | 1.58 | .06 | 1.3 | .05 | 1.93 | .07 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-15 | 16S | 18 | 1 | 1.58 | .06 | 1.5 | .06 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-20 | 16S | 14-16 | 2 | 1.58 | .06 | 2.0 | .08 | 2.9 | .11 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-22 | 16S | - | 2,5 | 1.58 | .06 | 2.2 | .09 | 3.8 | .15 | 3.2 | .13 | 26.6 | 1.05 |
| 27911-26 | 16S | 12-14 | 3 | 1.58 | .06 | 2.5 | .10 | 3.8 | .15 | 3.2 | .13 | 26.6 | 1.05 |
| 27913 | 16 | 16-18 | 1 / 1,5 | 1.58 | .06 | 1.7 | .07 | 2.6 | .10 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-08 | 16 | 24-26 | 0,15 / 0,2 | 1.58 | .06 | .85 | .03 | 1.55 | .06 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-12 | 16 | — | 0,15 / 0,75 | 1.58 | .06 | 1.2 | .05 | 2.6 | .10 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-13 | 16 | 20-26 | 0,15 / 0,6 | 1.58 | .06 | 1.3 | .05 | 1.93 | .07 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-15 | 16 | 18 | 1 | 1.58 | .06 | 1.5 | .06 | 2.6 | .10 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-20 | 16 | 14-16 | 2 | 1.58 | .06 | 2.0 | .08 | 2.9 | .11 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-22 | 16 | - | 2,5 | 1.58 | .06 | 2.2 | .09 | 3.8 | .15 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-26 | 16 | 12-14 | 3 | 1.58 | .06 | 2.5 | .10 | 3.8 | .15 | 3.2 | .13 | 31.75 | 1.25 |
| 27913-32 | 16 | 28-32 | 0,03 / 0,08 | 1.58 | .06 | 0.45 | .018 | 1.95 | .07 | 3.2 | .13 | 31.75 | 1.25 |
| 27914-8 | 12 | 8 | 9 | 2.38 | .09 | 4.55 | .18 | 6.8 | .27 | 4.8 | .19 | 42.5 | 1.67 |
| 27914-12 | 12 | — | 0,15 / 0,75 | 2.38 | .09 | 1.2 | .05 | 2.6 | .10 | 4.8 | .19 | 37.5 | 1.48 |

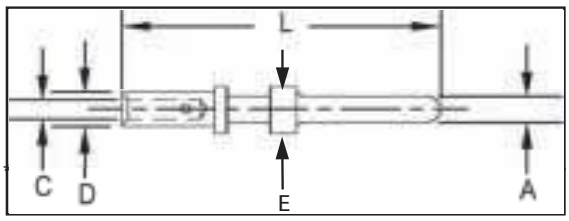



Male
(Pin)

* When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size $mm^2$ | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 27914-20 | 12 | 14-18 | 1 / 2 | 2.38 | .09 | 2.0 | .08 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27914-22 | 12 | | 2,5 | 2.38 | .09 | 2.2 | .09 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27914-26 | 12 | 12-14 | 3 | 2.38 | .09 | 2.5 | .10 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27914-30 | 12 | — | 4 | 2.38 | .09 | 3.0 | .12 | 4.8 | .19 | 4.8 | .19 | 37.5 | 1.48 |
| 27914-30M | 12 | — | 4 | 2.38 | .09 | 3.3 | .13 | 4.2 | .165 | 4.8 | .19 | 37.5 | 1.48 |
| 27914-38 | 12 | — | 5 | 2.38 | .09 | 3.6 | .14 | 4.8 | .19 | 4.8 | .19 | 37.5 | 1.48 |
| 27915 | 8 | — | 9 | 3.6 | .14 | 4.5 | .18 | 6.8 | .27 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-20 | 8 | 14-18 | 1 / 2 | 3.6 | .14 | 2.0 | .08 | 3.8 | .15 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-26 | 8 | 12 | 3 | 3.6 | .14 | 2.5 | .10 | 3.8 | .15 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-26-62 | 8 | 12-14 | 2 / 3 | 3.6 | .14 | 2.5 | .10 | 6.2 | .24 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-30 | 8 | — | 4 | 3.6 | .14 | 3.0 | .12 | 4.8 | .19 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-38 | 8 | — | 6 | 3.6 | .14 | 3.6 | .14 | 4.8 | .19 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-50 | 8 | — | 10 | 3.6 | .14 | 5.0 | .19 | 7.0 | .28 | 7.8 | .31 | 40.7 | 1.60 |
| 27915-58 | 8 | 6 | 13,2 | 3.6 | .14 | 5.8 | .23 | 7.8 | .31 | 7.8 | .31 | 40.7 | 1.60 |
| 27916 | 4 | 4 | 21 | 5.7 | .22 | 7.2 | .28 | 9.5 | .37 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-22 | 4 | — | 2,5 | 5.7 | .22 | 2.2 | .09 | 3.8 | .15 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-26 | 4 | 12 | 3 | 5.7 | .22 | 2.5 | .10 | 3.8 | .15 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-30 | 4 | — | 4 | 5.7 | .22 | 3.0 | .12 | 4.8 | .19 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-38 | 4 | — | 6 | 5.7 | .22 | 3.6 | .14 | 4.8 | .19 | 11.0 | .43 | 44.25 | 1.74 |
| 27916-50 | 4 | — | 10 | 5.7 | .22 | 5.0 | .19 | 7.0 | .28 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-62 | 4 | — | 16 | 5.7 | .22 | 6.2 | .24 | 9.5 | .37 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-78 | 4 | — | 25 | 5.7 | .22 | 7.8 | .31 | 9.5 | .37 | 11.0 | .43 | 41.25 | 1.62 |
| 27916-90 | 4 | — | 35 | 5.7 | .22 | 9.0 | .35 | 12.0 | .47 | 11.0 | .43 | 47 | 1.85 |
| 27917V | 0 | 1/0 (0) | 53 | 9.06 | .36 | 11.5 | .45 | 14.4 | .56 | 15.0 | .59 | 46.5 | 1.83 |

Specifications and dimensions subject to change
Dimensions shown in mm.

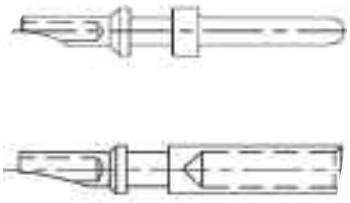



Male
(Pin)

*When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

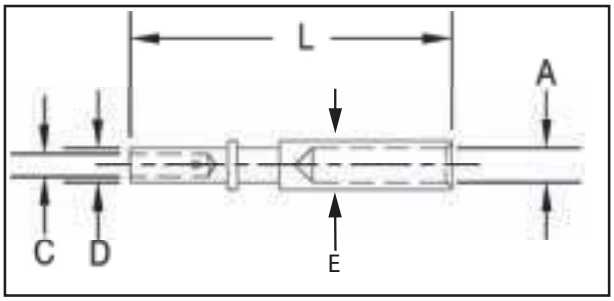
| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size $mm^2$ | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 27917 | 0 | 0 | 53 | 9.06 | .36 | 11.5 | .45 | 14.4 | .56 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-45 | 0 | 8 | 9 | 9.06 | .36 | 4.5 | .18 | 6.8 | .27 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-50 | 0 | - | 10 | 9.06 | .36 | 5.0 | .19 | 7.0 | .28 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-62 | 0 | - | 16 | 9.06 | .36 | 6.2 | .24 | 9.5 | .37 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-78 | 0 | - | 25 | 9.06 | .36 | 7.8 | .31 | 9.5 | .37 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-90 | 0 | - | 35 | 9.06 | .36 | 9.0 | .35 | 14.4 | .56 | 15.0 | .59 | 44.5 | 1.75 |
| 27917-107 | 0 | - | 50 | 9.06 | .36 | 10.7 | .42 | 14.4 | .56 | 15.0 | .59 | 44.5 | 1.75 |
| 46646-0 | 0 | 4 | 21 | 9.06 | .36 | 7.2 | .28 | 9.5 | .37 | 15.0 | .59 | 47.5 | 1.87 |
| 47107-78 | 4/0 | - | 25 | 12.7 | .50 | 7.8 | .31 | 9.5 | .37 | 20.0 | .79 | 58.0 | 2.28 |
| 47107-90* | 4/0 | 2 | 33,5 | 12.7 | .50 | 9.0 | .35 | 14.4 | .56 | 20.0 | .79 | 58.0 | 2.28 |
| 47107-107 | 4/0 | - | 50 | 12.7 | .50 | 10.7 | .42 | 14.4 | .56 | 20.0 | .71 | 56.3 | 7.22 |
| 47107-115 | 4/0 | 1/0 (0) | 53 | 12.7 | .50 | 11.5 | .45 | 14.4 | .56 | 20.0 | .79 | 56.3 | 2.22 |
| 47107-135 | 4/0 | 2/0 | 67,4 | 12.7 | .50 | 13.5 | .53 | 16.5 | .65 | 20.0 | .79 | 58.0 | 2.28 |
| 47107-144* | 4/0 | - | 70 | 12.7 | .50 | 14.4 | .57 | 20.0 | .79 | 20.0 | .79 | 63.0 | 2.48 |
| 47107-155 | 4/0 | - | 95 | 12.7 | .50 | 15.5 | .61 | 20.0 | .79 | 20.0 | .79 | 63.0 | 2.48 |
| 47107-165 | 4/0 | 4/0 | 107 | 12.7 | .50 | 16.5 | .65 | 20.0 | .79 | 20.0 | .79 | 63.0 | 2.48 |
| 47107-180 | 4/0 | - | 120 | 12.7 | .50 | 18 | .71 | 23.0 | .91 | 20.0 | .79 | 62.5 | 2.46 |

*Contact Customer Service Department if used with inserts 32A-1 or 36A-1.



## Contact Part Numbers - Solder

| Contact Type | Wire Size Max | Solder | |
|---|---|---|---|
| | | Male (Pin) | Female (Socket) |
| 20 | 20 | 44242 | 44244 |
| 18 | 18 | 13342 | 13341 |
| 16S | 16 | 27901 | 27951 |
| 16 | 16 | 27903 | 27953 |
| 12 | 12 | 27904 | 27954 |
| 8 | 8 | 27905 | 27925M |
| 4 | 4 | 27906 | 27926 |
| 0 | 0 (1/0) | 27907 | 27927 |

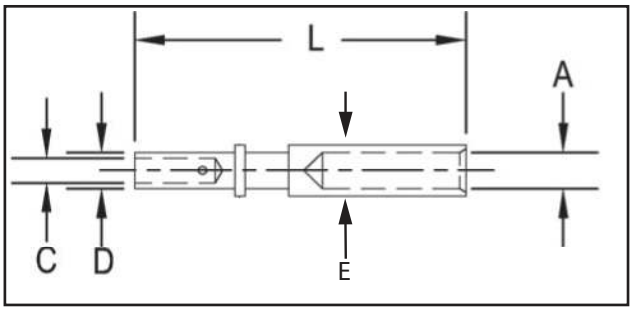



Female
(Socket)

* When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size mm² | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 46731 | 20 | 20-26 | 0,15 / 0,6 | 1.08 | .04 | 1.3 | .05 | 1.93 | .07 | 2.4 | .09 | 36.5 | 1.44 |
| 46731-1 | 20 | 20-26 | 0,15 / 0,6 | 1.08 | .04 | 1.3 | .05 | 1.93 | .07 | 2.4 | .09 | 26.3 | 1.03 |
| 46740S | 18 | 20-26 | 0,15 / 0,6 | 1.46 | .05 | 1.3 | .05 | 1.93 | .07 | 3.2 | .13 | 34.4 | 1.35 |
| 46740-15S | 18 | 20-22 | 0,3 / 0,6 | 1.46 | .05 | 1.2 | .05 | 1.93 | .07 | 2.4 | .09 | 34.4 | 1.35 |
| 46740-22S | 18 | 16-18 | 1 / 1,5 | 1.46 | .05 | 1.7 | .07 | 2.6 | .10 | 2.6 | .10 | 36.5 | 1.44 |
| 27961 | 16S | 16-18 | 1 / 1,5 | 1.65 | .06 | 1.7 | .07 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-12 | 16S | — | 0,5 / 0,75 | 1.65 | .06 | 1.2 | .05 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-13 | 16S | 20-26 | 0,15 / 0,6 | 1.65 | .06 | 1.3 | .05 | 1.93 | .07 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-15 | 16S | 18 | 1 | 1.65 | .06 | 1.5 | .06 | 2.6 | .10 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-20 | 16S | 14-16 | 2 | 1.65 | .06 | 2.0 | .08 | 2.9 | .11 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-22 | 16S | — | 2,5 | 1.65 | .06 | 2.2 | .09 | 3.8 | .15 | 3.2 | .13 | 26.6 | 1.05 |
| 27961-26 | 16S | 12-14 | 3 | 1.65 | .06 | 2.5 | .10 | 3.8 | .15 | 3.2 | .13 | 26.6 | 1.05 |
| 27963 | 16 | 16-18 | 1 / 1,5 | 1.65 | .06 | 1.7 | .07 | 2.6 | .10 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-08 | 16 | 24-26 | 0,15 / 0,2 | 1.65 | .06 | 0.85 | .03 | 1.55 | .06 | 2.4 | .09 | 36.5 | 1.44 |
| 27963-12 | 16 | — | 0,15 / 0,75 | 1.65 | .06 | 1.2 | .05 | 2.6 | .10 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-13 | 16 | 20-26 | 0,15 / 0,6 | 1.65 | .06 | 1.3 | .05 | 1.93 | .07 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-15 | 16 | 18 | 1 | 1.65 | .06 | 1.5 | .06 | 2.6 | .10 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-20 | 16 | 14-16 | 2 | 1.65 | .06 | 2.0 | .08 | 2.9 | .11 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-22 | 16 | — | 2,5 | 1.65 | .06 | 2.2 | .09 | 3.8 | .15 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-26 | 16 | 12-14 | 3 | 1.65 | .06 | 2.5 | .10 | 3.8 | .15 | 3.2 | .13 | 36.5 | 1.44 |
| 27963-32 | 16 | 28-32 | 0,03 / 0,08 | 1.65 | .06 | 0.45 | .018 | 1.95 | .07 | 3.2 | .13 | 36.5 | 1.44 |
| 27964-8 | 12 | 8 | 9 | 2.48 | .10 | 4.55 | .18 | 6.8 | .27 | 4.8 | .19 | 42.5 | 1.67 |
| 27964-12 | 12 | — | 0,15 / 0,75 | 2.48 | .10 | 1.2 | .05 | 2.6 | .10 | 4.8 | .19 | 37.5 | 1.48 |

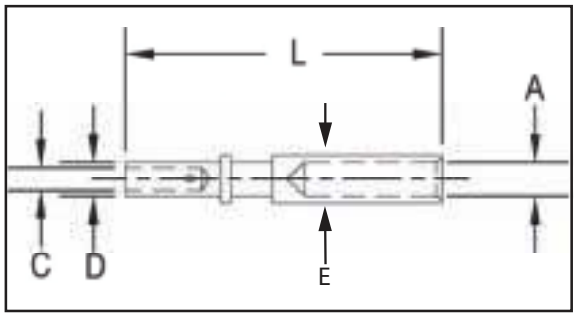
Specifications and dimensions subject to change
Dimensions shown in mm.




Female
(Socket)

* When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size mm² | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 27964-20 | 12 | 14-16-18 | 1 / 2 | 2.48 | .10 | 2.0 | .08 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27964-22 | 12 | — | 2,5 | 2.48 | .10 | 2.2 | .09 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27964-26 | 12 | 12-14 | 3 | 2.48 | .10 | 2.5 | .10 | 3.8 | .15 | 4.8 | .19 | 37.5 | 1.48 |
| 27964-30 | 12 | — | 4 | 2.48 | .10 | 3.0 | .12 | 4.8 | .19 | 4.8 | .19 | 37.5 | 1.48 |
| 27964-30M | 12 | | 4 | 2.48 | .10 | 3.3 | .13 | 4.2 | .165 | 4.8 | .19 | 37.5 | 1.48 |
| 27964-38 | 12 | — | 6 | 2.48 | .10 | 3.6 | .14 | 4.8 | .19 | 4.8 | .19 | 37.5 | 1.48 |
| 27935 | 8 | 8 | 9 | 3.7 | .15 | 4.5 | .18 | 6.8 | .27 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-20 | 8 | 14-18 | 1 / 2 | 3.7 | .15 | 2.0 | .08 | 3.8 | .15 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-26 | 8 | 12-14 | 3 | 3.7 | .15 | 2.5 | .10 | 3.8 | .15 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-26-62 | 8 | 12-14 | 2 / 3 | 3.7 | .15 | 2.5 | .10 | 6.2 | .24 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-30 | 8 | — | 8 | 3.7 | .15 | 3.0 | .12 | 4.8 | .19 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-38 | 8 | — | 6 | 3.7 | .15 | 3.6 | .14 | 4.8 | .19 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-50 | 8 | — | 10 | 3.7 | .15 | 5.0 | .19 | 6.8 | .27 | 7.8 | .31 | 40.7 | 1.60 |
| 27935-58 | 8 | 6 | 13,2 | 3.7 | .15 | 5.8 | .23 | 7.8 | .31 | 7.8 | .31 | 40.7 | 1.60 |
| 27936 | 4 | 4 | 21 | 5.8 | .23 | 7.2 | .28 | 9.5 | .37 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-22 | 4 | — | 2,5 | 5.8 | .23 | 2.2 | .09 | 3.8 | .15 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-26 | 4 | 12 | 3 | 5.8 | .23 | 2.5 | .10 | 3.8 | .15 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-30 | 4 | — | 4 | 5.8 | .23 | 3.0 | .12 | 4.8 | .19 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-38 | 4 | — | 6 | 5.8 | .23 | 3.6 | .14 | 4.8 | .19 | 11.0 | .43 | 44.2 | 1.74 |
| 27936-50 | 4 | — | 10 | 5.8 | .23 | 5.0 | .19 | 7.0 | .28 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-62 | 4 | — | 16 | 5.8 | .23 | 6.2 | .24 | 9.5 | .37 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-78 | 4 | — | 25 | 5.8 | .23 | 7.8 | .31 | 9.5 | .37 | 11.0 | .43 | 41.2 | 1.62 |
| 27936-90 | 4 | — | 35 | 5.8 | .23 | 9.0 | .35 | 12.0 | .47 | 11.0 | .43 | 47.0 | 1.85 |



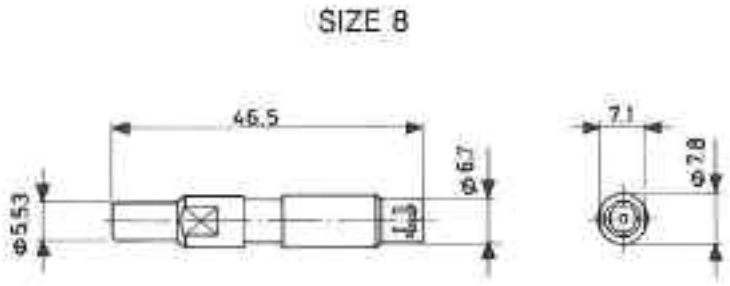

**Female (Socket)**

*When ordering add suffix: T9 for Silver • T12 for Gold - For other platings, consult our Customer Service Department.

| VEAM Part Number* | Contact Size | Wire Size (AWG) | Wire Size $mm^2$ | A | | C | | D | | E | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 27937 | 0 | 0 | 53 | 9.17 | .36 | 11.5 | .45 | 14.4 | .56 | 15.1 | .59 | 44.5 | 1.75 |
| 27937V | 0 | 1/0 (0) | 53 | 9.17 | .36 | 11.5 | .45 | 14.4 | .56 | 15.1 | .59 | 46.5 | 1.83 |
| 27937-45 | 0 | 8 | 9 | 9.17 | .36 | 4.5 | .18 | 6.8 | .27 | 15.1 | .59 | 44.5 | 1.75 |
| 27937-50 | 0 | — | 10 | 9.17 | .36 | 5.0 | .19 | 7.0 | .28 | 15.1 | .59 | 44.5 | 1.75 |
| 27937-62 | 0 | — | 16 | 9.17 | .36 | 6.2 | .24 | 9.5 | .37 | 15.1 | .59 | 44.5 | 1.75 |
| 27937-78 | 0 | — | 25 | 9.17 | .36 | 7.8 | .31 | 9.5 | .37 | 15.1 | .59 | 44.5 | 1.75 |
| 27937-90 | 0 | — | 35 | 9.17 | .36 | 9.0 | .35 | 14.4 | .56 | 15.1 | .59 | 44.5 | 1.75 |
| 27937-107 | 0 | — | 50 | 9.17 | .36 | 10.7 | .42 | 14.4 | .56 | 15.1 | .59 | 44.5 | 1.75 |
| 47647-0 | 0 | 4 | 21 | 9.17 | .36 | 7.2 | .28 | 9.5 | .37 | 15.1 | .59 | 47.5 | 1.87 |
| 47114-78 | 4/0 | — | 25 | 12.7 | .51 | 7.8 | .31 | 9.5 | .37 | 20.0 | .79 | 60.9 | 2.40 |
| 47114-90 | 4/0 | 2 | 33,5 | 12.7 | .51 | 9.0 | .35 | 14.4 | .56 | 20.0 | .79 | 60.9 | 2.40 |
| 47114-115 | 4/0 | 1/0 (0) | 53 | 12.7 | .51 | 11.5 | .45 | 14.4 | .56 | 20.0 | .79 | 59.2 | 2.32 |
| 47114-135 | 4/0 | 2/0 | 67,4 | 12.7 | .51 | 13.5 | .53 | 16.5 | .65 | 20.0 | .79 | 60.9 | 2.40 |
| 47114-144 | 4/0 | — | 70 | 12.7 | .51 | 14.4 | .57 | 20.0 | .79 | 20.0 | .79 | 65.9 | 2.59 |
| 47114-155 | 4/0 | — | 95 | 12.7 | .51 | 15.5 | .61 | 20.0 | .79 | 20.0 | .79 | 65.9 | 2.59 |
| 47114-165 | 4/0 | 4/0 | 107 | 12.7 | .51 | 16.5 | .65 | 20.0 | .79 | 20.0 | .79 | 65.9 | 2.59 |
| 47114-180 | 4/0 | — | 120 | 12.7 | .51 | 18 | .71 | 23.0 | .91 | 20.0 | .79 | 63.7 | 2.50 |

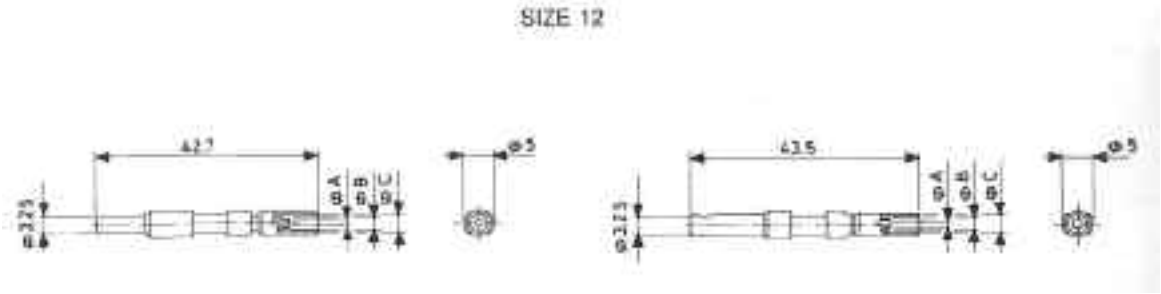
** Contact Customer Service Department if used with inserts 32A-1 or 36A-1.*

## Male - Female Coaxial Contact used with F80 Inserts




Male - female coaxial contacts can be used on the CIR-TB connectors with inserts having size "8" contact cavities. Inserts are F80 type. To be mated with all "C8" types that are independent from the cable used.
P/N - C8 - 142 PS.

## Coaxial Contacts Used With F80 Inserts

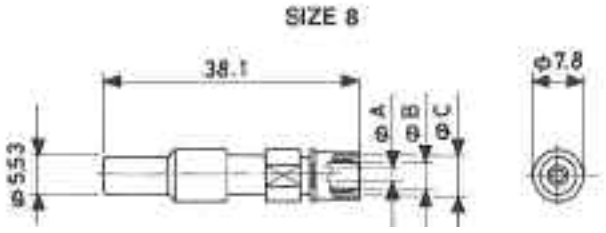



Coaxial contact in the table below are used in Size "12" contact cavities of F80 inserts. For electrical characteristics please consult factory.

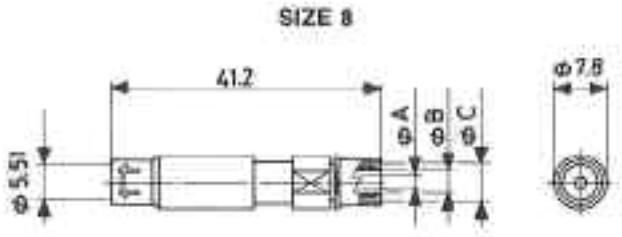
| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C12-178P | RG 178 | 0,6 | 1,9 | 2,5 |
| C12-178S | RG 178 | 0,6 | 1,9 | 2,5 |
| C12-188P | RG 188/ RG174 | 0,6 | 2,25 | 2,9 |
| C12-188S | RG 188/RG 174 | 0,6 | 2,25 | 2,9 |

*Note: please consult the "CIR Series Assembly Guide" for assembly instructions and accessories.*

## Male Coaxial Contacts used with F80 Inserts




## Female Coaxial Contacts used with F80 Inserts



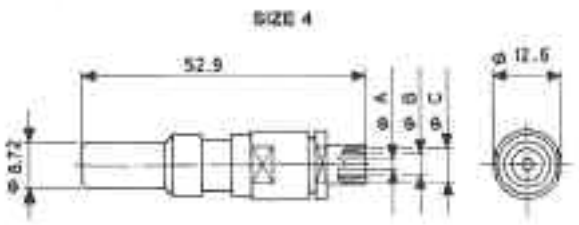

Coaxial contacts in this table are used in Size "8" contact cavities of F80 inserts. For electrical characteristics please consult the factory.

| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C8-058P | RG 58/RG 303 | 1,02 | 3,15 | 5,2 |
| C8-062P | RG 62/RG 59 | 0,75 | 3,9 | 5,6 |
| C8-142P | RG 223/RG 142/L3CFB | 1,02 | 3,15 | 5,6 |
| C8-142PM | RG 223/RG 142/L3CFB | 1,02 | 3,15 | 5,6 |
| C8-141PM | RG 141 | 1,02 | 3,15 | 5,25 |
| C8-180P | RG 180 | 0,55 | 2,8 | 4,45 |
| C8-178P | RG 178 | 0,6 | 1 | 2,5 |
| C8-179P | RG 179 | 0,55 | 1,7 | 3,25 |
| C8-179HS-P | HS-K02252-D | 0,55 | 1,7 | 3,25 |
| C8-302DS-P | RG 302DS• | 1,02 | 3,9 | 6,1 |
| C8-302DS-P/AD1 | G042730-G2 | 1,02 | 3,9 | 7,2 |
| C8-141P | RG 141 | 1,02 | 3,15 | 5,25 |
| C8-400P | RG 400 | 1,02 | 3,15 | 5,6 |
| C8-062DC-P | RG 62/SPEC• | 0,75 | 3,9 | 5,8 |
| C8-174P | RG 174/RG 316 | 0,75 | 1,7 | 3,25 |
| C8-180PFM | 2YCCY 0,4/2,5 | 0,55 | 2,8 | 4,8 |
| C8S-999P | RG 999 | 1,5 | 3,2 | — |
| C8-212PM | 5C-2VJISC3501 | 1,02 | 5 | 7,5 |

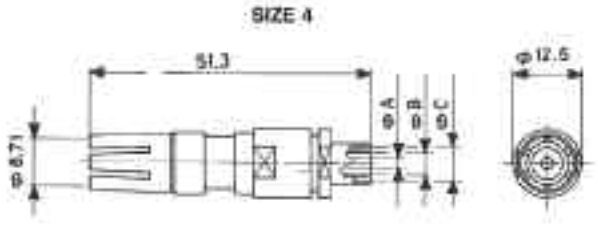
| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C8-058S | RG 58/RG 303 | 1,02 | 3,15 | 5,2 |
| C8-062S | RG 62/RG 59 | 0,75 | 3,9 | 5,6 |
| C8-142S | RG 223/RG 142/L3CFB | 1,02 | 3,15 | 5,6 |
| C8-142SM | RG 223/RG 142/L3CFB | 1,02 | 3,15 | 5,6 |
| C8-141SM | RG 141 | 1,02 | 3,15 | 5,25 |
| C8-180S | RG 180 | 0,55 | 2,8 | 4,45 |
| C8-178S | RG 178 | 0,6 | 1 | 2,5 |
| C8-179S | RG 179 | 0,55 | 1,7 | 3,25 |
| C8-179HS-S | HS-K02282 | 0,55 | 1,7 | 3,25 |
| C8-302DS-S | RG 302DS• | 1,02 | 3,9 | 6,1 |
| C8-302DS-S/AD1 | G042730-G2 | 1,02 | 3,9 | 7,2 |
| C8-141S | RG 141 | 1,02 | 3,15 | 5,25 |
| C8-400S | RG 400 | 1,02 | 3,15 | 5,6 |
| C8-062DC-S | RG 62/SPEC• | 0,75 | 3,9 | 5,8 |
| C8-174S | RG 174/RG 316 | 0,75 | 1,7 | 3,25 |
| C8-180SFM | RG 180 | 0,55 | 2,8 | 4,8 |
| C8S-999S | RG 999 | 1,5 | 3,2 | — |
| C8-212SM | 5C-2VJISC3501 | 1,02 | 5 | 7,5 |

*Note: Please consult "CIR Series Assembly Guide" for assembly instructions and accessories.*
*• - Double shield braided cable*

## Male Coaxial Contacts used with F80 Inserts




## Female Coaxial Contacts used with F80 Inserts



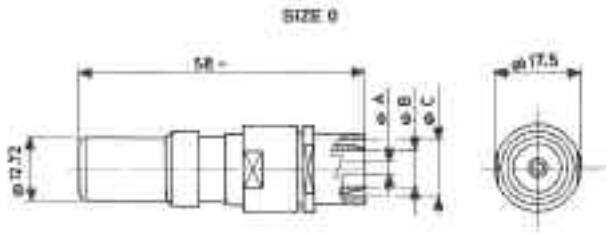

Coaxial contacts in this table are used in Size "4" contact cavities of F80 inserts. For electrical characteristics please consult the factory.

| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C4-006P | RG 6<br>5C 2VJISC 3501<br>22-98-02 SHR-1 | 1,05 | 4,9 | 7,5 |
| C4-059P | RG 59 | 0,75 | 3,9 | 5,6 |
| C4-304P | RG 304 | 1,06 | 4,9 | 7,5 |
| C4-999P | RG 999 | 1,5 | 6,2 | 8,1 |

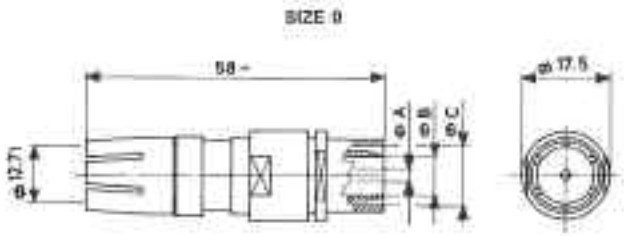
| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C4-006S | RG 6<br>5C 2VJISC 3501<br>22-98-02-SHR-1 | 1,05 | 4,9 | 7,5 |
| C4-059S | RG 59 | 0,75 | 3,9 | 5,6 |
| C4-304S | RG 304 | 1,6 | 4,9 | 7,5 |
| C4-999S | RG 999 | 1,5 | 6,2 | 8,1 |

*Note: Please consult "CIR Series Assembly Guide" for assembly instructions and accessories.*

## Male Coaxial Contacts used with F80 Inserts



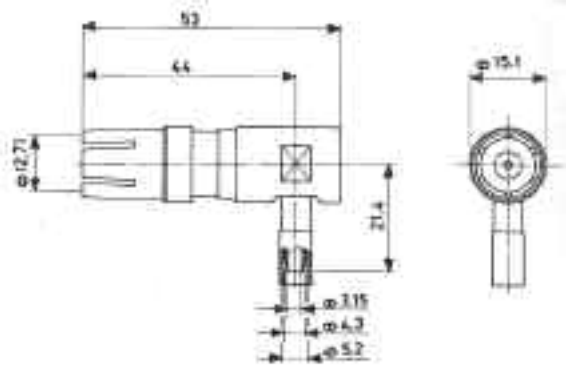

## Female Coaxial Contacts used with F80 Inserts




Coaxial contacts in this table are used in Size "0" contact cavities of F80 inserts. For electrical characteristics please consult the factory.

| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C0-008-1P ◊ | RG 8 | 2,5 | 9,7 | 12,3 |
| C0-008-3P | S0AM-LS0H | 2,5 | 10,3 | 14,1 |
| C0-011P/1 | RG 11 | 1,5 | 7,5 | 11,4 |
| C0-058P-1 | VENLO H121 RG 58 | 1,3 | 3,5 | 5,4 |
| C0-179P | RG 179 | 0,55 | 1,7 | 3,25 |
| C0-213P | RG 213/214 | 2,5 | 7,65 | 11,4 |
| C0M-H8112P* | H8112P | 6,75 | 8,55 | 11 |

| Contact Type | Used with Cable | Ø A | Ø B | Ø C |
|---|---|---|---|---|
| C0-008-1S ◊ | RG 8 | 2,5 | 9,7 | 12,3 |
| C0-008-3S | S0AM-LS0H | 2,5 | 10,3 | 14,1 |
| C0-011S/1 | RG 11 | 1,5 | 7,5 | 11,4 |
| C0-058S-1 | VENLO H121 RG 58 | 1,3 | 3,5 | 5,4 |
| C0-179S | RG 179 | 0,55 | 1,7 | 3,25 |
| C0-213S | RG 213/214 | 2,5 | 7,65 | 11,4 |
| C0M-058S90 ■ | RG 58 | See drawing below | | |




(COM-058S90)

*Note: Please consult "CIR Series Assembly Guide" for assembly instructions and accessories.*
** - To be mated with C0M-058S90 female contact*
*■ - To be mated with C0M-H8112P male contact*
*◊ - Consult factory*

Specifications and dimensions subject to change
Dimensions shown in mm.

| Contact Quantity | Insert Arrangement | Standard Contact / Current Rating / Wire Size / MM$^2$ | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG<br>0.52 | 18<br>7.5 A<br>18-20<br>AWG<br>0.82 | 16<br>13 A<br>16-18<br>AWG<br>1.3 | 12<br>23 A<br>12-14<br>AWG<br>3.3-2.1 | 8<br>46 A<br>8<br>AWG<br>8.6 | 4<br>80 A<br>4<br>AWG<br>21 | 0<br>150 A<br>0<br>AWG<br>56 | 4/0<br>225 A<br>4/0<br>AWG<br>107 | |
| 1 | 16-2 | | | | 1 | | | | | E |
| 1 | 16-12 | | | | | | 1 | | | A |
| 1 | 18-6 | | | | | | 1 | | | D |
| 1 | 18-16 * | | | | 1 | | | | | C |
| 1 | 18-61 * | | | | | | 1 coax | | | D |
| 1 | 20-2 | | | | | | | 1 | | D |
| 1 | 22-7 | | | | | | | 1 | | E |
| 1 | 24A-1 | | | | | | | 1 | | B |
| 1 | 32A-1 | | | | | | | | 1 | B |
| 1 | 36A-1 * | | | | | | | | 1 | C |
| 2 | 10SL-4 | | | 2 | | | | | | A |
| 2 | 14S-9 | | | 2 | | | | | | A |
| 2 | 16S-4 | | | 2 | | | | | | D |
| 2 | 16-11 | | | | 2 | | | | | A |
| 2 | 16-13 (TC) | | | | 2 | | | | | A |
| 2 | 18-3 | | | | 2 | | | | | D |
| 2 | 18-14 | | | 1 | | | 1 | | | A |
| 2 | 20-23 | | | | | 2 | | | | A |
| 2 | 22-1 | | | | | 2 | | | | D |
| 2 | 22-8 | | | | 2 | | | | | E |
| 2 | 22-11 | | | 2 | | | | | | B |
| 2 | 24A-2 * | | | | 2 | | | | | HV (4200 VDC) |
| 2 | 24-9 | | | | | | 2 | | | A |
| 2 | 32A-2 * | | | 1 | | | | | 1 | D |
| 2 | 32-5 | | | | | | | 2 | | D |
| 2 | 32D-2 * | | | | 1 | | | | 1 | A |
| 2 | 36A-2 | | | | | | | 2 | | A |
| 2 | 40A-2 * | | | | | 1 | | | 1 | D |
| 3 | 10SL-3 | | | 3 | | | | | | A |
| 3 | 10SL-55 (TC) | | | 3 | | | | | | I |
| 3 | 14S-1 | | | 3 | | | | | | A |
| 3 | 14S-7 | | | 3 | | | | | | A |
| 3 | 14S-12 (14S-1x100 °) | | | 3 | | | | | | A |
| 3 | 16S-5 | | | 3 | | | | | | A |
| 3 | 16-7 | | | 2 | | 1 | | | | A |
| 3 | 16-10 | | | | 3 | | | | | A |
| 3 | 18-5 | | | 1 | 2 | | | | | D |
| 3 | 18-22 | | | 3 | | | | | | D |
| 3 | 20-3 | | | | 3 | | | | | D |
| 3 | 20-19 | | | | | 3 | | | | A |
| 3 | 22-2 | | | | | 3 | | | | D |
| 3 | 22-6 | | | 1 | | 2 | | | | D |
| 3 | 22-9 | | | | 3 | | | | | E |
| 3 | 22-21 | | | 2 | | | | 1 | | A |
| 3 | 28-3 | | | | | 3 | | | | E |
| 3 | 28-6 | | | | | | 3 | | | D |
| 3 | 28P-3 * | | | | | 3 | | | | C |
| 3 | 32A-3 | | | | | | 3 | | | B |

* *Note: Consult our Customer Service Department for insert arrangements.*

| Contact Quantity | Insert Arrangement | Standard Contact / Current Ratings / Wire Size | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG | 18<br>7.5 A<br>18-20<br>AWG | 16<br>13 A<br>16-18<br>AWG | 12<br>23 A<br>12<br>AWG | 8<br>46 A<br>8<br>AWG | 4<br>80 A<br>4<br>AWG | 0<br>150 A<br>0<br>AWG | 4/0<br>225 A<br>4/0<br>AWG | |
| 4 | 14S-2 | | | 4 | | | | | | I |
| 4 | 14S-10 | | | 4 | | | | | | I |
| 4 | 16-9 | | | 2 | 2 | | | | | A |
| 4 | 18-4 | | | 4 | | | | | | D |
| 4 | 18-10 | | | | 4 | | | | | A |
| 4 | 18-13 | | | | 3 | 1 | | | | A |
| 4 | 20-4 | | | | 4 | | | | | D |
| 4 | 20-24 | | | 2 | | 2 | | | | A |
| 4 | 22-4 | | | | 2 | 2 | | | | A |
| 4 | 22-22 | | | | | 4 | | | | A |
| 4 | 24-22 | | | | | 4 | | | | D |
| 4 | 32A-4 * | | | 2 | | | | 2 | | B |
| 4 | 32-17 | | | | | | 4 | | | D |
| 4 | 36-5 | | | | | | | 4 | | A |
| 4 | 40D-4 | | | | | 4 | | | | C |
| 5 | 14S-5 | | | 5 | | | | | | I |
| 5 | 16S-8 | | | 5 | | | | | | A |
| 5 | 18-11 | | | | 5 | | | | | A |
| 5 | 18-20 | | | 5 | | | | | | A |
| 5 | 18-30 (18-20x110°) | | | 5 | | | | | | A |
| 5 | 18-31 (18-20x260°) | | | 5 | | | | | | A |
| 5 | 22-12 | | | 3 | | 2 | | | | D |
| 5 | 22-34 | | | 2 | 3 | | | | | D |
| 5 | 24-12 | | | | 3 | | 2 | | | A |
| 5 | 28-5 | | | 2 | 1 | | 2 | | | D |
| 5 | 28A-5GM | | | | | 5 | | | | A |
| 5 | 32-1 | | | | 3 | | | 2 | | A=E; B,C,D,E=D |
| 5 | 32-2 | | | 2 | | | 3 | | | E |
| 5 | 32A-5GM | | | | | | 5 | | | A |
| 5 | 32B-5(GM) | | | | | | 5 | | | A |
| 5 | 40A-3 * | | | | 2 | | | 3 | | E |
| 5 | 40A-5GM | | | | | | | 5 | | A |
| 5 | 40B-5 * | | | | 1 | | 1 | 3 | | A |
| 6 | 14S-6 | | | 6 | | | | | | I |
| 6 | 18-06 * | | | 2 | 4 | | | | | A |
| 6 | 18-12 | | | 6 | | | | | | A |
| 6 | 20-8 | | | 4 | | 2 | | | | I |
| 6 | 20-17 | | | 1 | 5 | | | | | A |
| 6 | 20-22 | | | 3 | | 3 | | | | A |
| 6 | 22-5 | | | 4 | 2 | | | | | D |
| 6 | 22-15 | | | 1 | 5 | | | | | D=E; A,B,C,E,F=A |
| 6 | 24-06 | | | 2 | | 4 | | | | D |
| 6 | 24A-6 * | | | | 4 | 2 | | | | D |
| 6 | 28-22 | | | 3 | | | 3 | | | D |
| 6 | 28A-6 | | | 1 | | 4 | 1 | | | A |
| 6 | 36-3 | | | | 3 | | | 3 | | D |
| 6 | 36-6 | | | | | | 4 | 2 | | A |
| 6 | 32A-6 | | | | 4 | | 2 | | | E |
| 6 | 36A-51 | | | 1 | | | 2 | 3 | | D |
| 6 | 36A-61* | | | | 4 | | 2 | | | E |

**Note: Consult our Customer Service Department for insert arrangements.*

| Contact Quantity | Insert Arrangement | Standard Contact / Current Rating / Wire Size | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG | 18<br>7.5 A<br>18-20<br>AWG | 16<br>13 A<br>16-18<br>AWG | 12<br>23 A<br>12-14<br>AWG | 8<br>46 A<br>8<br>AWG | 4<br>80 A<br>4<br>AWG | 0<br>150 A<br>0<br>AWG | 4/0<br>225 A<br>4/0<br>AWG | |
| 6 | 36B-6 | | | 2 | 1 | 3 | | | | B |
| 6 | 36B-61 | | | | 4 | | 2 | | | E |
| 6 | 40A-4 | | | | 2 | | | 4 | | A |
| 7 | 14SA-7 * | | | 7 | | | | | | I |
| 7 | 16S-1 | | | 7 | | | | | | A |
| 7 | 18-9 | | | 5 | 2 | | | | | I |
| 7 | 18-17 (18-9x100°) | | | 5 | 2 | | | | | I |
| 7 | 20-15 | | | | 7 | | | | | A |
| 7 | 20A-7 | | 7 | | | | | | | D |
| 7 | 22-28 | | | | 7 | | | | | A |
| 7 | 24-2(GM) | | | | 7 | | | | | D |
| 7 | 24-10 | | | | | 7 | | | | A |
| 7 | 24-27 | | | 7 | | | | | | E |
| 7 | 24A-7 | | | | 7 | | | | | D |
| 7 | 28-10 | | | | 3 | 2 | 2 | | | G=D; BAL.=A |
| 7 | 28A-7 | | | 4 | | | 3 | | | A |
| 7 | 28B-7* | | | | | 7 | | | | A |
| 7 | 32A-7 | | | | 4 | | 3 | | | D |
| 7 | 36-77 | | | | | | 7 | | | D |
| 7 | 40A-7 * | | | | 2 | | | 5 | | A |
| 8 | 18-8 | | | 7 | 1 | | | | | A |
| 8 | 20-7 | | | 8 | | | | | | A,B,H,G=D<br>C,D,E,F=A |
| 8 | 20A-8 | | | 6 | | 2 | | | | I |
| 8 | 22-18 | | | 8 | | | | | | A,B,F,G,H=D<br>C,D,E=A |
| 8 | 22-23 | | | | 8 | | | | | H=D; BAL.=A |
| 8 | 24-6 (HM) | | | | 8 | | | | | A,G,H=D; BAL.=A |
| 8 | 24A-8 * | | | 8 | | | | | | HV (15KV) |
| 8 | 32-15 | | | | 6 | | | 2 | | D |
| 8 | 32A-8 | | | | | 8 | | | | A |
| 8 | 40A-8 | | | 4 | | | | 4 | | E |
| 8 | 40A-10 | | | 4 | | | 4 | | | D |
| 9 | 20-16 | | | 7 | 2 | | | | | A |
| 9 | 20-18 | | | 6 | 3 | | | | | A |
| 9 | 20-21 | | | 8 | 1 | | | | | A |
| 9 | 20A-9 | | | | 9 | | | | | J=D; BAL.=I |
| 9 | 22-17 | | | 8 | 1 | | | | | A=D; BAL.=A |
| 9 | 22-27 (CR) | | | 8 | | 1 | | | | J=D; BAL.=A |
| 9 | 22A-9 | | | 9 | | | | | | 1,2,3=D; BAL=A |
| 9 | 24-11(EM) | | | | 6 | 3 | | | | A |
| 9 | 28-1 | | | | 6 | 3 | | | | A,J,E=D;BAL.=A |
| 9 | 28A-9 | | | 5 | | | 4 | | | A |
| 10 | 16A-10 | | 10 | | | | | | | A |
| 10 | 18-1 | | | 10 | | | | | | B,C,F,G=A; BAL.=I |
| 10 | 18-19 | | | 10 | | | | | | A |
| 10 | 18-24 (18-1x250°) | | | 10 | | | | | | B,C,F,G=A; BAL.=I |
| 10 | 22A-10 | | | 10 | | | | | | A |
| 10 | 22B-10* | | | 8 | | 2 | | | | A |

**Note: Consult our Customer Service Department for insert arrangements.*

| Contact Quantity | Insert Arrangement | Standard Contact / Current Rating / Wire Size / MM$^2$ | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG<br>0.52 | 18<br>7.5 A<br>18-20<br>AWG<br>0.82 | 16<br>13 A<br>16-18<br>AWG<br>1.3 | 12<br>23 A<br>12-14<br>AWG<br>3.3 | 8<br>46 A<br>8<br>AWG<br>8.6 | 4<br>80 A<br>4<br>AWG<br>21 | 0<br>150 A<br>0<br>AWG<br>56 | 4/0<br>225 A<br>4/0<br>AWG<br>107 | |
| 10 | 24-21 | | | 9 | | 1 | | | | D |
| 10 | 28-19 | | | 6 | 4 | | | | | H,M=B; A,B=D; BAL.=A |
| 10 | 28A-10 * | | | | 10 | | | | | D |
| 10 | 32A-10 * | | | | | 8 | 2 | | | A |
| 10 | 36A-10 * | | | | | 8 | 2 | | | A |
| 10 | 36B-10 * | | | | | 8 | 2 | | | A |
| 11 | 20-33 | | | 11 | | | | | | A |
| 11 | 20A-11 * | 5 | | 5 | | 1 | | | | A |
| 11 | 24-20 | | | 9 | 2 | | | | | D |
| 11 | 24A-11 | | | 9 | | 2 | | | | A |
| 11 | 40A-11 * | | | 6 | | | | 5 | | A |
| 12 | 24-19 | | | 12 | | | | | | A |
| 12 | 28-9 | | | 6 | 6 | | | | | D |
| 12 | 28-18 | | | 12 | | | | | | M=C; G,H,J,K,L=D<br>A,B=A; BAL.=I |
| 12 | 28-51 | | | | 12 | | | | | D |
| 12 | 36A-12 | | | | | 10 | 2 | | | A |
| 12 | 36B-12 | | | 3 | 3 | 3 | 3 | | | D |
| 13 | 20-11 | | | 13 | | | | | | I |
| 13 | 20-25 (20-11x100°) | | | 13 | | | | | | I |
| 13 | 20-30 (20-11x250°) | | | 13 | | | | | | I |
| 13 | 24-013 * | | | 7 | 6 | | | | | A |
| 13 | 32A-13 | | | | 13 | | | | | D |
| 14 | 20-27 | | | 14 | | | | | | A |
| 14 | 22-19 | | | 14 | | | | | | A |
| 14 | 24A-14 | | | 12 | | | 2 | | | I |
| 14 | 28-2 | | | 12 | 2 | | | | | D |
| 14 | 28-20 | | | 4 | 10 | | | | | A |
| 14 | 28A-14 | | | | 14 | | | | | D |
| 14 | 32-9 | | | 12 | | | 2 | | | D |
| 14 | 32A-14 * | | | 14 | | | | | | HV (6000 VAC) |
| 14 | 36-78 | | | 2 | | 12 | | | | D |
| 14 | 36B-78 | | | 2 | | 12 | | | | D |
| 14 | 36D-78 | | | 4 | | 10 | | | | D |
| 14 | 40A-14 * | | | | 6 | | 8 | | | A |
| 15 | 28-17 | | | 15 | | | | | | R=B; M,N,P=D; BAL.=A |
| 16 | 22A-16 * | | | 16 | | | | | | I |
| 16 | 24-5 | | | 16 | | | | | | A |
| 16 | 24-7 | | | 14 | 2 | | | | | A |
| 16 | 24A-16 * | | | 15 | | 1 | | | | E |
| 16 | 28A-16 * | | | 12 | | 4 | | | | A |
| 16 | 32-68 | | | 12 | | | 4 | | | A |
| 17 | 20-29 | | | 17 | | | | | | A |
| 17 | 28-59 | | | 10 | 7 | | | | | A |
| 19 | 20A-48 | | | 19 | | | | | | I |
| 19 | 22-14 | | | 19 | | | | | | A |
| 19 | 24-67 | | | | 19 | | | | | A |
| 19 | 32-76 | | | | 19 | | | | | A |
| 19 | 40-19 | | | | 17 | | 2 | | | A |
| 19 | 40A-19 | | | | | 17 | 2 | | | A |
| 19 | 40B-19 | | | | | 19 | | | | A |
| 20 | 28-16 | | | 20 | | | | | | A |
| 20 | 40A-20 | | | | 18 | 2 | | | | D |
| 21 | 40A-21 | | | | 20 | | 1 | | | 21=D; BAL.=A |
| 22 | 28-11 | | | 18 | 4 | | | | | A |

**Note: Consult our Customer Service Department for insert arrangements.*

| Contact Quantity | Insert Arrangement | Standard Contact / Current Rating / Wire Size | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG | 18<br>7.5 A<br>18-20<br>AWG | 16<br>13 A<br>16-18<br>AWG | 12<br>23 A<br>12-14<br>AWG | 8<br>46 A<br>8<br>AWG | **4**<br>80 A<br>4<br>AWG | 0<br>150 A<br>0<br>AWG | 4/0<br>225 A<br>4/0<br>AWG | |
| 22 | 32A-22 | | | 20 | | | | 2 | | A |
| 22 | 32B-22 * | | | 20 | | | 2 | | | A |
| 22 | 36A-22 | | | | 22 | | | | | D |
| 23 | 32-6 | | | 16 | 2 | 3 | 2 | | | A |
| 23 | 32-13 | | | 18 | 5 | | | | | D |
| 23 | 32-16 | | | 16 | 2 | 3 | 2 | | | A |
| 24 | 24-28 | | | 24 | | | | | | I |
| 24 | 40A-24 | | | | 16 | 8 | | | | D |
| 25 | 24A-25 | | | 25 | | | | | | I |
| 25 | 32A-25 | | | | 25 | | | | | A |
| 25 | 40A-25 | | | | 24 | | 1 | | | A |
| 26 | 28-12 | | | 26 | | | | | | A |
| 26 | 28-13 | | | 26 | | | | | | A |
| 27 | 32A-27 | | | 17 | 10 | | | | | A |
| 27 | 40A-27 | | | | 25 | | 2 | | | A |
| 28 | 24A-28 | | | 28 | | | | | | I |
| 28 | 28A-63(CR) | | | 19 | 9 | | | | | e=A; BAL.= I |
| 28 | 32A-28 | | | | 28 | | | | | A |
| 29 | 20A-29 * | | 25 | | 4 | | | | | I |
| 29 | 28A-29 * | | | 27 | | 2 | | | | A |
| 29 | 40-10 | | | 16 | | 9 | 4 | | | A |
| 29 | 40A-29 * | | | 5 | 18 | 6 | | | | A |
| 30 | 32-8 | | | 24 | 6 | | | | | A |
| 30 | 32A-30 | | | 20 | 10 | | | | | A |
| 30 | 40A-30 | | | | 29 | | 1 | | | A |
| 31 | 28A-31 * | 25 | | | | 6 | | | | I |
| 31 | 32-31 | | | 31 | | | | | | A |
| 31 | 32A-31 * | | | 13 | 18 | | | | | A |
| 31 | 36-9 | | | 14 | 14 | 2 | 1 | | | A |
| 31 | 36-18 (36-9x100°) | | | 14 | 14 | 2 | 1 | | | A |
| 31 | 40A-31 | | | | 31 | | | | | D |
| 34 | 40A-34 * | | | | 33 | 1 | | | | I |
| 35 | 28-15 | | | 35 | | | | | | A |
| 35 | 28A-35 | | | 35 | | | | | | A |
| 35 | 28B-35 | | | 35 | | | | | | A |
| 35 | 32-7 | | | 28 | 7 | | | | | A,B,h,j=I; BAL.=A |
| 35 | 36-15 | | | 35 | | | | | | M=D; BAL.=A |
| 35 | 40A-35 | | | | 35 | | | | | D |
| 37 | 22A-37 | | 37 | | | | | | | A |
| 37 | 28-21 | | | 37 | | | | | | A |
| 37 | 40B-37 | | | | 37 | | | | | A |
| 37 | 40D-37 * | | | | 37 | | | | | A |
| 38 | 40A-38 | | | | 38 | | | | | A |
| 39 | 36-54 | | | 31 | | 8 | | | | A |
| 40 | 32A-40 | | | 40 | | | | | | A |
| 42 | 32-59 | | | 40 | | 2 | | | | A |
| 44 | 36-74 * | | | 43 | | 1 | | | | A |
| 47 | 36-7 | | | 40 | 7 | | | | | A |

* *Note: Consult our Customer Service Department for insert arrangements.*

| Contact Quantity | Insert Arrangement | Standard Contact / Current Rating / Wire Size | | | | | | | | Service Rating |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20<br>7.5 A<br>20-22<br>AWG | 18<br>7.5 A<br>18-20<br>AWG | 16<br>13 A<br>16-18<br>AWG | 12<br>23 A<br>12-14<br>AWG | 8<br>46 A<br>8<br>AWG | 4<br>80 A<br>4<br>AWG | 0<br>150 A<br>0<br>AWG | 4/0<br>225 A<br>4/0<br>AWG | |
| 47 | 36-8 | | | 46 | 1 | | | | | A |
| 47 | 36-16 (36-7x100°) | | | 40 | 7 | | | | | A |
| 47 | 36-17 (36-7x110°) | | | 40 | 7 | | | | | A |
| 47 | 40-9 | | | 24 | 22 | 1 | | | | A |
| 47 | 40A-47 | | | 24 | 22 | 1 | | | | A |
| 48 | 32A-48 | | | 48 | | | | | | I |
| 48 | 36-10 | | | 48 | | | | | | A |
| 48 | 36-11 (36-10x100°) | | | 48 | | | | | | A |
| 48 | 36-12 (36-10x110°) | | | 48 | | | | | | A |
| 48 | 36A-48 | | | 48 | | | | | | I |
| 54 | 32-22 | | | 54 | | | | | | A |
| 55 | 24A-55 | 55 | | | | | | | | I |
| 55 | 32A-55 | | | 55 | | | | | | A |
| 55 | 40-55 * | | | 35 | 19 | 1 | | | | I |
| 56 | 36-66 | | | 52 | 4 | | | | | A |
| 58 | 40-58 * | | | 38 | 19 | 1 | | | | I |
| 60 | 40A-60 | | | 60 | | | | | | A |
| 61 | 32A-69 (CR) | 41 | | 20 | | | | | | A |
| 61 | 40-63 * | | | 61 | | | | | | A |
| 62 | 40A-62 | | | 60 | | 2 | | | | A |
| 72 | 28-72 | 72 | | | | | | | | I |
| 72 | 36A-72 | | 52 | 16 | 4 | | | | | I |
| 85 | 40-56 | | | 85 | | | | | | A |
| 85 | 40A-56 | | | 85 | | | | | | A |
| 100 | 40A-100 | | 100 | | | | | | | A |
| 101 | 32-101 | 101 | | | | | | | | I |
| 130 | 40A-130 | | 114 | 12 | 4 | | | | | I |
| 150 | 40A-150 * | | 150 | | | | | | | I |
| 159 | 40T-159 * | 159 | | | | | | | | I |

* *Note: Consult our Customer Service Department for insert arrangements.*

## Insert Arrangements Listed by Shell Sizes and Arrangement Numbers

| Insert Arrangements | Total Contact | Contact Size | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 10SL-3 | 3 | | | | | 3 | A |
| 10SL-4 | 2 | | | | | 2 | A |
| 10SL-55 (TC) | 3 | | | | | 3 | I |
| 14S-1 | 3 | | | | | 3 | A |
| 14S-2 | 4 | | | | | 4 | I |
| 14S-5 | 5 | | | | | 5 | I |
| 14S-6 | 6 | | | | | 6 | I |
| 14S-7 | 3 | | | | | 3 | I |
| 14S-9 | 2 | | | | | 2 | A |
| 14S-10(14S-2x100°) | 4 | | | | | 4 | I |
| 14S-12(14S-1x100°) | 3 | | | | | 3 | A |
| 14-SA-7* | 7 | | | | | 7 | I |
| 16S-1 | 7 | | | | | 7 | A |
| 16S-4 | 2 | | | | | 2 | D |
| 16S-5 | 3 | | | | | 3 | A |
| 16S-8 | 5 | | | | | 5 | A |
| 16-2 | 1 | | | | 1 | | E |
| 16-7 | 3 | | | 1 | | 2 | A |
| 16-9 | 4 | | | | 2 | 2 | A |
| 16-10 | 3 | | | | 3 | | A |
| 16-11 | 2 | | | | 2 | | A |
| 16-12 | 1 | | 1 | | | | A |
| 16-13 (TC) | 2 | | | | 2 | | A |
| 16-52 (TC) | 2 | | | | 2 | | A |
| 16A-10 | 10 | ALL SIZE 18 | | | | | A |
| 18-1 | 10 | | | | | 10 | * |
| 18-3 | 2 | | | | 2 | | D |
| 18-4 | 4 | | | | | 4 | D |
| 18-5 | 3 | | | | 2 | 1 | D |
| 18-06 | 6 | | | | 4 | 2 | A |
| 18-6 | 1 | | 1 | | | | D |
| 18-8 | 8 | | | | 1 | 7 | A |
| 18-9 | 7 | | | | 2 | 5 | I |
| 18-10 | 4 | | | | 4 | | A |
| 18-11 | 5 | | | | 5 | | A |
| 18-12 | 6 | | | | | 6 | A |
| 18-13 | 4 | | | 1 | 3 | | A |
| 18-14 | 2 | | 1 | | | 1 | A |
| 18-16 | 1 | | | | 1 | | C |
| 18-17(18-9x100°) | 7 | | | | 2 | 5 | I |
| 18-19 | 10 | | | | | 10 | A |
| 18-20 | 5 | | | | | 5 | A |
| 18-22 | 3 | | | | | 3 | D |
| 18-24(18-1x250°) | 10 | | | | | 10 | * |
| 18-30(18-20x110°) | 5 | | | | | 5 | A |
| 18-31(18-20x260°) | 5 | | | | | 5 | A |
| 18-61* | 1 | COAX SIZE 4 | | | | | D |

*Note: Consult our Customer Service Department for insert arrangements

For pictorial insert arrangements refer to page 37-50.

| Insert Arrangements | Total Contacts | Contact Size | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 20-2 | 1 | 1 | | | | | D |
| 20-3 | 3 | | | | 3 | | D |
| 20-4 | 4 | | | | 4 | | D |
| 20-7 | 8 | | | | | 8 | * |
| 20-8 | 6 | | | 2 | | 4 | I |
| 20-11 | 13 | | | | | 13 | I |
| 20-15 | 7 | | | | 7 | | A |
| 20-16 | 9 | | | | 2 | 7 | A |
| 20-17 | 6 | | | | 5 | 1 | A |
| 20-18 | 9 | | | | 3 | 6 | A |
| 20-19 | 3 | | | 3 | | | A |
| 20-21 | 9 | | | | 1 | 8 | A |
| 20-22 | 6 | | | 3 | | 3 | A |
| 20-23 | 2 | | | 2 | | | A |
| 20-24 | 4 | | | 2 | | 2 | A |
| 20-25(20-11x100°) | 13 | | | | | 13 | I |
| 20-27 | 14 | | | | | 14 | A |
| 20-29 | 17 | | | | | 17 | A |
| 20-30(20-11x250°) | 13 | | | | | 13 | I |
| 20-33 | 11 | | | | | 11 | A |
| 20A-7 | 7 | ALL SIZE 18 | | | | | D |
| 20A-8 | 8 | | | 2 | | 6 | I |
| 20A-9 | 9 | | | | 9 | | * |
| 20A-11 | 11 | 5 SIZE 20 | | 1 | | 5 | A |
| 20A-29* | 29 | 25 SIZE 18, 4 SIZE 12 | | | | | I |
| 20A-48 | 19 | | | | | 19 | I |
| 22-1 | 2 | | | 2 | | | D |
| 22-2 | 3 | | | 3 | | | D |
| 22-4 | 4 | | | 2 | 2 | | A |
| 22-5 | 6 | | | | 2 | 4 | D |
| 22-6 | 3 | | | 2 | | 1 | D |
| 22-7 | 1 | 1 | | | | | E |
| 22-8 | 2 | | | | 2 | | E |
| 22-9 | 3 | | | | 3 | | E |
| 22-11 | 2 | | | | | 2 | B |
| 22-12 | 5 | | | 2 | | 3 | D |
| 22-14 | 19 | | | | | 19 | A |
| 22-15 | 6 | | | | 5 | 1 | * |
| 22-17 | 9 | | | | 1 | 8 | * |
| 22-18 | 8 | | | | | 8 | * |
| 22-19 | 14 | | | | | 14 | A |
| 22-21 | 3 | 1 | | | | 2 | A |
| 22-22 | 4 | | | 4 | | | A |
| 22-23 | 8 | | | | 8 | | * |
| 22-27 | 9 | | | 1 | | 8 | * |
| 22-28 | 7 | | | | 7 | | A |
| 22-34 | 5 | | | | 3 | 2 | D |
| 22A-9 | 9 | | | | | 9 | A |
| 22A-10 | 10 | | | | | 10 | A |
| 22A-16* | 16 | | | | | 16 | I |
| 22A-37 | 37 | ALL SIZE 18 | | | | | A |
| 22B-10* | 10 | | | 2 | | 8 | A |

Specifications and dimensions subject to change
Dimensions shown in mm.

## Insert Arrangements Listed by Shell Sizes and Arrangement Numbers

| Insert Arrangements | Total Contacts | Contact Sizes | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 24-2 | 7 | | | | 7 | | D |
| 24-2 (GM) | 7 | | | | 7 | | D |
| 24-5 | 16 | | | | | 16 | A |
| 24-06 | 6 | | | 4 | | 2 | D |
| 24-6 | 8 | | | | 8 | | * |
| 24-6 (HM) | 8 | | | | 8 | | * |
| 24-7 | 16 | | | | 2 | 14 | A |
| 24-9 | 2 | | 2 | | | | A |
| 24-10 | 7 | | | 7 | | | A |
| 24-11 | 9 | | | 3 | 6 | | A |
| 24-11 (EM) | 9 | | | 3 | 6 | | A |
| 24-12 | 5 | | 2 | | 3 | | A |
| 24-013 | 13 | | | | 6 | 7 | A |
| 24-19 | 12 | | | | | 12 | A |
| 24-20 | 11 | | | | 2 | 9 | D |
| 24-21 | 10 | | | 1 | | 9 | D |
| 24-22 | 4 | | | 4 | | | D |
| 24-27 | 7 | | | | | 7 | E |
| 24-28 | 24 | | | | | 24 | I |
| 24-67 | 19 | | | | 19 | | A |
| 24A-1 | 1 | 1 | | | | | B |
| 24A-2* (US) | 2 | | | | 2 | | HV |
| 24A-6 (US) | 6 | | | 2 | 4 | | D |
| 24A-7 | 7 | | | | 7 | | D |
| 24A-8* | 8 | | | | | 8 | HV |
| 24A-11 (US) | 11 | | | 2 | | 9 | A |
| 24A-16* | 16 | | | 1 | | 15 | E |
| 24A-24* | 12 | | | | 12 | | A |
| 24A-25 | 25 | | | | | 25 | I |
| 24A-28 | 28 | | | | | 28 | I |
| 24A-55 | 55 | ALL SIZE 20 | | | | | I |
| 24T-2 | 2 | | 1 | 1 | | | D |
| 28-1 | 9 | | | 3 | 6 | | * |
| 28-2 | 14 | | | | 2 | 12 | D |
| 28-3 | 3 | | | 3 | | | E |
| 28-5 | 5 | | 2 | | 1 | 2 | D |
| 28-6 | 3 | | 3 | | | | D |
| 28-9 | 12 | | | | 6 | 6 | D |
| 28-10 | 7 | | 2 | 2 | 3 | | * |
| 28-11 | 22 | | | | 4 | 18 | A |
| 28-12 | 26 | | | | | 26 | A |
| 28-13 (28-12X100°) | 26 | | | | | 26 | A |
| 28-15 | 35 | | | | | 35 | A |
| 28-16 | 20 | | | | | 20 | A |
| 28-17 | 15 | | | | | 15 | * |
| 28-18 | 12 | | | | | 12 | * |
| 28-19 | 10 | | | | 4 | 6 | * |
| 28-20 | 14 | | | | 10 | 4 | A |
| 28-21 | 37 | | | | | 37 | A |
| 28-22 | 6 | | 3 | | | 3 | D |
| 28-31* | 31 | | | 6 | 25 SIZE 20 | | I |
| 28-51 | 12 | | | | 12 | | D |
| 28-59 | 17 | | | | 7 | 10 | A |
| 28-72 | 72 | ALL SIZE 20 | | | | | I |

| Insert Arrangement | Total Contacts | Contact Size | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 28A-7 | 7 | | 2 | 1-4M | | 4 | A |
| 28A-9 | 9 | | 4 | | | 5 | A |
| 28A-10* | 10 | | | | 10 | | D |
| 28A-14 | 14 | | | | 14 | | D |
| 28A-16* | 16 | | | 4 | | 12 | A |
| 28A-29* | 29 | | | 2 | | 27 | A |
| 28A-31* | 31 | | | 6 | 25 SIZE 20 | | I |
| 28A-35 | 35 | | | | | 35 | A |
| 28A-63 (CR) | 28 | | | | 9 | 19 | * |
| 28B-7* | 7 | | | 7 | | | A |
| 28B-35 | 35 | | | | | 35 | A |
| 28P-3* | 3 | | | 3 | | | C |
| 32-1 | 5 | 2 | | | 3 | | * |
| 32-2 | 5 | | 3 | | | 2 | E |
| 32-5 | 2 | 2 | | | | | D |
| 32-6 | 23 | | 2 | 3 | 2 | 16 | A |
| 32-7 | 35 | | | | 7 | 28 | * |
| 32-8 | 30 | | | | 6 | 24 | A |
| 32-9 | 14 | | 2 | | | 12 | D |
| 32-13 | 23 | | | | 5 | 18 | D |
| 32-15 | 8 | 2 | | | 6 | | D |
| 32-16 (32-6x100°) | 23 | | 2 | 3 | 2 | 16 | A |
| 32-17 | 4 | | 4 | | | | D |
| 32-22 | 54 | | | | | 54 | A |
| 32-31 | 31 | | | 8 | | 31 | A |
| 32-59 | 42 | | | 2 | | 40 | A |
| 32-68 | 16 | | 4 | | | 12 | A |
| 32-76 | 19 | | | | 19 | | A |
| 32-101 | 101 | ALL SIZE 20 | | | | | I |
| 32A-1 | 1 | SIZE 4/0 | | | | | B |
| 32A-2* | 2 | 1 SIZE 4/0 | | | | 1 | D |
| 32A-3 | 3 | | 3 | | | | B |
| 32A-5 (GM) | 5 | | 5 | | | | A |
| 32A-6 | 6 | | 2 | | 4 | | E |
| 32A-7 | 7 | | 3 | | 4 | | D |
| 32A-8 | 8 | | | 8 | | | A |
| 32A-10* | 10 | | 2 | 8 | | | A |
| 32A-13 | 13 | | | | 13 | | D |
| 32A-14* | 14 | | | | | 14 | HV |
| 32A-22 | 22 | 2 | | | | 20 | A |
| 32A-25 | 25 | | | | 25 | | A |
| 32A-27 | 27 | | | 10 | | 17 | A |
| 32A-28 | 28 | | | | 28 | | A |
| 32A-30 | 30 | | | 10 | | 20 | A |
| 32A-31* | 31 | | | | 18 | 13 | A |
| 32A-40 | 40 | | | | | 40 | A |
| 32A-48 | 48 | | | | | 48 | I |
| 32A-55 | 55 | | | | | 55 | A |
| 32A-69 (CR) | 61 | 20 Size 16, 41 Size 20 | | | | | A |
| 32B-5 (GM) | 5 | | 5 | | | | A |
| 32B-22* | 22 | | 2 | | | 20 | A |
| 32D-2* | 2 | 1 SIZE 4/0 | | | 1 | | A |

Specifications and dimensions subject to change
Dimensions shown in mm.

## Insert Arrangements Listed by Shell Sizes and Arrangement Numbers

| Insert Arrangements | Total Contacts | Contact Sizes | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 36-3 | 6 | 3 | | | 3 | | D |
| 36-5 | 4 | 4 | | | | | A |
| 36-6 | 6 | 2 | 4 | | | | A |
| 36-7 | 47 | | | | 7 | 40 | A |
| 36-8 | 47 | | | | 1 | 46 | A |
| 36-9 | 31 | | 1 | 2 | 14 | 14 | A |
| 36-10 | 48 | | | | | 48 | A |
| 36-11 (36-10X100°) | 48 | | | | | 48 | A |
| 36-12 (36-10X250°) | 48 | | | | | 48 | A |
| 36-15 | 35 | | | | | 35 | * |
| 36-16 (36-7X100°) | 47 | | | | 7 | 40 | A |
| 36-17 (36-7X250°) | 47 | | | | 7 | 40 | A |
| 36-18 (36-9X100°) | 31 | | 1 | 2 | 14 | 14 | A |
| 36-54 | 39 | | | 8 | | 31 | A |
| 36-66 | 56 | | | | 4 | 52 | A |
| 36-74 | 44 | | | 1 | | 43 | A |
| 36-77 | 7 | | 7 | | | | D |
| 36-78 * | 14 | | | 12 | | 2 | D |
| 36A-1 | 1 | SIZE 4/0 | | | | | C |
| 36A-2 | 2 | 2 | | | | | A |
| 36A-10 | 10 | | 2 | 8 | | | A |
| 36A-12 | 12 | | 2 | 10 | | | A |
| 36A-22 | 22 | | | | 22 | | D |
| 36A-48 | 48 | | | | | 48 | I |
| 36A-51 | 6 | 3 | 2 | | | 1 | D |
| 36A-61 | 6 | | 2 | | 4 | | E |
| 36A-72 | 72 | 4 SIZE 12, 16 SIZE 16, 52 SIZE 18 | | | | | I |
| 36B-6 | 6 | | | 3 | 1 | 2 | B |
| 36B-10 * | 10 | | 2 | 8 | | | A |
| 36B-12 | 12 | | 3 | 3 | 3 | 3 | D |
| 36B-61 | 6 | | 2 | | 4 | | E |
| 36B-78 | 14 | | | 12 | | 2 | D |
| 36B-90 | 1 | SPECIAL | | | | | D |
| 36D-78 | 14 | | | 10 | | 4 | D |
| 40-9 | 47 | | | 1 | 22 | 24 | A |
| 40-10 | 29 | | 4 | 9 | | 16 | A |
| 40-19 | 19 | | 2 | | 17 | | A |
| 40-55 | 55 | | | 1 | 19 | 35 | I |
| 40-56 | 85 | | | | | 85 | A |
| 40-58 * | 58 | | | 1 | 19 | 38 | I |
| 40-63 | 61 | | | | | 61 | A |
| 40A-2 | 2 | | | 1 | 1 SIZE 4/0 | | D |
| 40A-3 | 5 | 3 | | | 2 | | E |
| 40A-4 | 6 | 4 | | | 2 | | A |
| 40A-5 (GM) | 5 | 5 | | | | | A |
| 40A-7 | 7 | 5 | | | 2 | | A |
| 40A-8 | 8 | 4 | | | | 4 | E |
| 40A-10 | 8 | | 4 | | | 4 | D |
| 40A-11* | 11 | 5 | | | | 6 | A |
| 40A-14 | 14 | | 8 | | 6 | | A |
| 40A-19 | 19 | | 2 | 17 | | | A |
| 40A-20 | 20 | | | 2 | 18 | | D |

| Insert Arrangements | Total Contacts | Contact Sizes | | | | | Service Rating |
|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 8 | 12 | 16 | |
| 40A-21 | 21 | | 1 | | 20 | | * |
| 40A-24 | 24 | | | 8 | 16 | | D |
| 40A-25 | 25 | | 1 | | 24 | | A |
| 40A-27 | 27 | | 2 | | 25 | | A |
| 40A-29 * | 29 | | | 6 | 18 | 5 | A |
| 40A-30 | 30 | | 1 | | 29 | | A |
| 40A-31 | 31 | | | | 31 | | D |
| 40A-34 * | 34 | | | 1 | 33 | | I |
| 40A-35 | 35 | | | | 35 | | D |
| 40A-38 | 38 | | | | 38 | | A |
| 40A-47 | 47 | | | 1 | 22 | 24 | A |
| 40A-56 | 85 | | | | | 85 | A |
| 40A-60 | 60 | | | | | 60 | A |
| 40A-62 | 62 | | | 2 | | 60 | A |
| 40A-100 | 100 | ALL SIZE 18 | | | | | A |
| 40A-130 | 130 | 114 SIZE 18 | | | 4 | 12 | I |
| 40A-150 | 150 | ALL SIZE 18 | | | | | I |
| 40B-4 | 4 | 4 | | | | | E |
| 40B-5 | 5 | 3 | 1 | | 1 | | A |
| 40B-19 | 19 | | | 19 | | | A |
| 40B-37 | 37 | | | | 37 | | A |
| 40B-90 | 3 | 1 SPECIAL | | | 2 | | D |
| 40D-4 | 4 | | | 4 | | | C |
| 40D-37 | 37 | | | | 37 | | A |
| 40T-159* | 159 | ALL SIZE 20 | | | | | I |

*Note: Consult our Customer Service Department for insert arrangements
For pictorial insert arrangements refer to page 37-50.

## *Insert Rotations - Alternate Positions*

Alternate Positions of Insert Arrangements (Key Stationary - Insert Rotated) Front View of Pin Insert

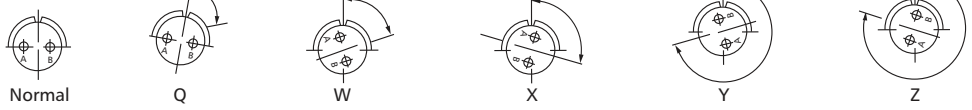
Normal Q W X Y Z

| Insert Type | Degrees for Alternate Positions | | | | |
|---|---|---|---|---|---|
| | Q | W | X | Y | Z |
| 10SL-3 | 180 | - | - | - | - |
| 14S-2 | - | - | 120 | 240 | - |
| 14S-5 | - | - | 110 | - | - |
| 14S-6 | - | 90 | | - | - |
| 14S-7 | - | 90 | 180 | 270 | - |
| 14S-9 | - | 70 | 145 | 215 | 290 |
| 16S-1 | - | 80 | - | - | 280 |
| 16S-4 | - | 35 | 110 | 250 | 325 |
| 16S-5 | - | 70 | 145 | 215 | 290 |
| 16S-8 | - | - | 170 | 265 | - |
| 16-7 | - | 80 | 110 | 250 | 280 |
| 16-9 | - | 35 | 110 | 250 | 325 |
| 16-10 | - | 90 | 180 | 270 | - |
| 16-11 | - | 35 | 110 | 250 | 325 |
| 16-13 | - | 35 | 110 | 250 | 325 |
| 16A-10 | - | 35 | 112 | 235 | 315 |
| 18-1 | - | 70 | 145 | 215 | 290 |
| 18-3 | - | 35 | 110 | 250 | 325 |
| 18-4 | - | 35 | 110 | 250 | 325 |
| 18-5 | - | 80 | 110 | 250 | 280 |
| 18-8 | - | 70 | - | - | 290 |
| 18-9 | - | 80 | 110 | 250 | 280 |
| 18-10 | - | - | 120 | 240 | - |
| 18-11 | - | - | 170 | 265 | - |
| 18-12 | - | 80 | - | - | 280 |
| 18-13 | - | 80 | 110 | 250 | 280 |
| 18-14 | - | 80 | 110 | 250 | 280 |
| 18-19 | - | - | 120 | 240 | - |
| 18-20 | - | 90 | 180 | 270 | - |
| 18-22 | - | 70 | 145 | 215 | 290 |
| 20-3 | - | 70 | 145 | 215 | 290 |
| 20-4 | - | 45 | 110 | 250 | - |
| 20-7 | - | 80 | 110 | 250 | 280 |
| 20-8 | - | 80 | 110 | 250 | 280 |
| 20-15 | - | 80 | - | - | 280 |
| 20-16 | - | 80 | 110 | 250 | 280 |
| 20-17 | - | 90 | 180 | 270 | - |
| 20-18 | - | 35 | 110 | 250 | 325 |
| 20-19 | - | 90 | 180 | 270 | - |
| 20-21 | - | 35 | 110 | 250 | 325 |

| Insert Type | Degrees for Alternate Positions | | | | |
|---|---|---|---|---|---|
| | Q | W | X | Y | Z |
| 20-22 | - | 80 | 110 | 250 | 280 |
| 20-23 | - | 35 | 110 | 250 | 325 |
| 20-24 | - | 35 | 110 | 250 | 325 |
| 20-27 | - | 35 | 110 | 250 | 325 |
| 20-29 | - | 80 | - | - | 280 |
| 20-33 | - | - | - | - | 280 |
| 20A-8 | - | 35 | 110 | 250 | 325 |
| 20A-9 | - | - | 110 | 250 | - |
| 20A-29 | - | 45 | - | 210 | - |
| 20A-48 | - | - | 80 | 280 | - |
| 22-1 | - | 35 | 110 | 250 | 325 |
| 22-2 | - | 70 | 145 | 215 | 290 |
| 22-4 | - | 35 | 110 | 250 | 325 |
| 22-5 | - | 35 | 110 | 250 | 325 |
| 22-6 | - | 80 | 110 | 250 | 280 |
| 22-8 | - | 35 | 110 | 250 | 325 |
| 22-9 | - | 70 | 145 | 215 | 290 |
| 22-11 | - | 35 | 110 | 250 | 325 |
| 22-12 | - | 80 | 110 | 250 | 280 |
| 22-14 | - | 80 | - | - | 280 |
| 22-15 | - | 80 | 110 | 250 | 280 |
| 22-17 | - | 80 | 110 | 250 | 280 |
| 22-18 | - | 80 | 110 | 250 | 280 |
| 22-19 | - | 80 | 110 | 250 | 280 |
| 22-21 | - | 80 | 110 | 250 | 280 |
| 22-22 | - | - | 110 | 250 | - |
| 22-23 | - | 35 | - | 250 | - |
| 22-27 | - | 80 | - | 250 | 280 |
| 22-28 | - | 80 | - | - | 280 |
| 22-34 | - | 80 | 110 | 250 | 280 |
| 22A-9 | - | 60 | 135 | 250 | 305 |
| 22A-10 | - | - | 120 | 240 | - |
| 22A-16 | - | 80 | 110 | 250 | 280 |
| 22A37 | - | 80 | 112 | 250 | 280 |
| 22B-10 | - | 45 | 110 | 250 | 315 |
| 24-2 | - | 80 | - | - | 280 |
| 24-5 | - | 80 | 110 | 250 | 280 |
| 24-06 | - | 40 | - | - | 320 |
| 24-6 | - | 80 | 110 | 250 | 280 |
| 24-7 | - | 80 | 110 | 250 | 280 |

| Insert Type | Degrees for Alternate Positions | | | | |
|---|---|---|---|---|---|
| | Q | W | X | Y | Z |
| 24-9 | - | 35 | 110 | 250 | 325 |
| 24-10 | - | 80 | - | - | 280 |
| 24-11 | - | 35 | 110 | 250 | 325 |
| 24-12 | - | 80 | 110 | 250 | 280 |
| 24-20 | - | 80 | 110 | 250 | 280 |
| 24-21 | - | 80 | 110 | 250 | 280 |
| 24-22 | - | 45 | 110 | 250 | - |
| 24-27 | - | 80 | - | - | 280 |
| 24-28 | - | 80 | 110 | 250 | 280 |
| 24-67 | - | 80 | - | - | 335 |
| 24A-2 | - | 35 | 110 | 250 | 325 |
| 24A-6 | - | 42 | 134 | 262 | 339 |
| 24A-7 | - | 80 | - | - | 280 |
| 24A-11 | - | 35 | 110 | 250 | 325 |
| 24A-25 | - | 80 | 110 | 250 | 280 |
| 24A-28 | - | 65 | 146 | 235 | - |
| 24A-55 | - | 80 | 110 | 250 | 280 |
| 28-1 | - | 80 | 110 | 250 | 280 |
| 28-2 | - | 35 | 110 | 250 | 325 |
| 28-3 | - | 70 | 145 | 215 | 290 |
| 28-5 | - | 35 | 110 | 250 | 325 |
| 28-6 | - | 70 | 145 | 215 | 290 |
| 28-9 | - | 80 | 110 | 250 | 280 |
| 28-10 | - | 80 | 110 | 250 | 280 |
| 28-11 | - | 80 | 110 | 250 | 280 |
| 28-12 | - | 90 | 180 | 270 | - |
| 28-15 | - | 80 | 110 | 250 | 280 |
| 28-16 | - | 80 | 110 | 250 | 280 |
| 28-17 | - | 80 | 110 | 250 | 280 |
| 28-18 | - | 70 | 145 | 215 | 290 |
| 28-19 | - | 80 | 110 | 250 | 280 |
| 28-20 | - | 80 | 110 | 250 | 280 |
| 28-21 | - | 80 | 110 | 250 | 280 |
| 28-22 | - | 70 | 145 | 215 | 290 |
| 28-51 | 23 | 80 | 135 | 195 | - |
| 28-59 | - | 35 | 110 | 250 | 325 |
| 28-72 | - | 72 | 144 | 216 | 288 |
| 28A-7 | - | 60 | 166 | 270 | 320 |
| 28A-9 | - | 110 | 250 | 260 | 280 |
| 28A-10 | - | 80 | 135 | 195 | - |
| 28A-14 | - | 35 | 90 | - | - |
| 28A-16 | - | 65 | 135 | 225 | 275 |
| 28A-31 | - | 35 | - | 260 | 310 |
| 28A-35 | - | 80 | 110 | 250 | 280 |
| 28B-7 | - | 80 | - | - | 280 |
| 28B-35 | - | 80 | 110 | 250 | 280 |
| 28P-3 | - | 70 | 145 | 215 | 290 |

Specifications and dimensions subject to change
Dimensions shown in mm.




Alternate Positions of Insert Arrangements (Key Stationary - Insert Rotated)

Front View of Pin Insert

| Insert Type | Degrees for Alternate Positions | | | | |
|---|---|---|---|---|---|
| | Q | W | X | Y | Z |
| 32-1 | - | 80 | 110 | 250 | 280 |
| 32-2 | - | 70 | 145 | 215 | 290 |
| 32-5 | - | 80 | 110 | 250 | 325 |
| 32-6 | - | 80 | 110 | 25 | 280 |
| 32-7 | - | 80 | 125 | 235 | 280 |
| 32-8 | - | 80 | 125 | 235 | 280 |
| 32-9 | | 80 | 110 | 250 | 280 |
| 32-13 | - | 80 | 110 | 250 | 280 |
| 32-15 | 80 | 35 | 110 | 250 | 280 |
| 32-17 | - | 45 | 110 | 250 | - |
| 32-22 | - | 80 | 110 | 250 | 280 |
| 32-31 | - | 80 | 125 | 215 | 280 |
| 32-59 | - | 36 | 108 | 252 | 324 |
| 32-68 | - | 65 | 135 | 225 | 275 |
| 32-76 | - | 80 | 110 | 250 | 280 |
| 32-101 | - | 30 | 142 | - | - |
| 32A-3 | - | 22 | 44 | 75 | 98 |
| 32A-5 | - | 90 | 180 | 270 | - |
| 32A-8 | - | 35 | 122 | - | 315 |
| 32A-13 | - | 65 | 130 | 230 | 295 |
| 32A-14 | - | 35 | 90 | - | - |
| 32A-22 | - | 55 | 135 | 230 | 295 |
| 32A-25 | - | 60 | 120 | - | - |
| 32A-27 | - | 30 | 115 | 285 | 335 |
| 32A-30 | - | 65 | - | - | - |
| 32A-40 | - | 35 | 130 | - | - |
| 32A-48 | - | 80 | 125 | 235 | 280 |
| 32A-55 | - | 80 | 110 | 250 | 280 |
| 32B-22 | - | 35 | 110 | 250 | 325 |
| 32D-2 | - | 80 | 110 | - | - |

| Insert Type | Degrees for Alternate Positions | | | | |
|---|---|---|---|---|---|
| | Q | W | X | Y | Z |
| 40-9 | - | 65 | 125 | 225 | 310 |
| 40-10 | - | 65 | 125 | 225 | 310 |
| 40-19 | - | 35 | 110 | 250 | 325 |
| 40-56 | 150 | 72 | 144 | 216 | 288 |
| 40-58 | - | 80 | - | - | - |
| 40-63 | - | 80 | 110 | 250 | 280 |
| 40A-2 | - | 35 | 110 | 250 | 325 |
| 40A-3 | - | 70 | 145 | 215 | 290 |
| 40A-4 | - | 50 | 120 | 240 | 325 |
| 40A-5 | - | 33 | - | - | 270 |
| 40A-7 | - | 108 | - | - | - |
| 40A-8 | - | 35 | 110 | 250 | 325 |
| 40A-14 | - | 80 | 135 | 195 | - |
| 40A-20 | - | 50 | 110 | 250 | 280 |
| 40A-21 | - | 50 | 130 | 260 | 280 |
| 40A-24 | - | 27 | - | - | - |
| 40A-25 | - | 50 | 130 | 260 | 280 |
| 40A-27 | - | 45 | 110 | 250 | 315 |
| 40A-30 | - | 30 | - | - | 295 |
| 40A-31 | - | 80 | 110 | 250 | 280 |
| 40A-35 | - | 70 | 130 | 230 | 290 |
| 40A-37 | | 80 | 110 | 250 | 280 |
| 40A-38 | - | 37 | 74 | 285 | 322 |
| 40A-47 | - | 65 | 125 | 225 | 310 |
| 40A-56 | - | 72 | 144 | 216 | 288 |
| 40A-60 | - | 80 | 110 | 250 | 280 |
| 40A-62 | - | 80 | 130 | 230 | 280 |
| 40A-100 | - | 30 | 105 | 230 | 315 |
| 40A-130 | - | 45 | 113 | - | 309 |
| 40B-4 | - | 45 | 110 | - | - |
| 40B-19 | - | 35 | 105 | 225 | 325 |
| 40B-37 | - | 30 | 135 | - | - |
| 40D-4 | - | 45 | 110 | - | - |
| 40D-37 | - | 80 | 110 | 250 | 280 |

| | | | | | |
|---|---|---|---|---|---|
| 36-3 | - | 70 | 145 | 215 | 290 |
| 36-5 | - | - | 120 | 240 | - |
| 36-6 | - | 35 | 110 | 250 | 325 |
| 36-7 | - | 80 | 110 | 250 | 280 |
| 36-8 | - | 80 | 110 | 250 | 280 |
| 36-9 | - | 80 | 125 | 235 | 280 |
| 36-10 | - | 80 | 125 | 235 | 280 |
| 36-15 | - | 60 | 125 | 245 | 305 |
| 36-54 | - | 67 | - | - | - |
| 36-66 | - | 110 | 250 | 260 | 280 |
| 36-77 | - | - | 90 | - | - |
| 36-78 | - | 35 | 106 | 254 | 325 |
| 36A-2 | - | 35 | 110 | 250 | 325 |
| 36A-10 | - | 45 | 110 | 250 | 315 |
| 36A-22 | - | 80 | 110 | 250 | 280 |
| 36A-48 | - | 65 | - | - | - |
| 36A-51 | - | 45 | 135 | 225 | 315 |
| 36A-61 | - | 80 | - | - | 280 |
| 36A-72 | - | - | 110 | - | - |
| 36B-78 | - | 35 | 106 | 254 | 325 |
| 36D-78 | - | 35 | 106 | 254 | 325 |
| 36B-12 | - | 45 | 110 | 150 | 290 |

**Contact Legend**

| | 16-2 | 16-12 | 18-6 | 18-16 | 18-61 |
|---|---|---|---|---|---|
| Insert Arrangement | 16-2 | 16-12 | 18-6 | 18-16 | 18-61 |
| Number of Contacts | 1 | 1 | 1 | 1 | 1 |
| Size of Contacts | 12 | 4 | 4 | 12 | Coax Size 4 |
| Service Rating | E | A | D | C | D |

| | 20-2 | 22-7 | 24A-1 | 32A-1 | 36A-1 |
|---|---|---|---|---|---|
| Insert Arrangement | 20-2 | 22-7 | 24A-1 | 32A-1 | 36A-1 |
| Number of Contacts | 1 | 1 | 1 | 1 | 1 |
| Size of Contacts | 0 | 0 | 0 | 4/0 | 4/0 |
| Service Rating | D | E | B | B | C |

| | 10SL-4 | 14S-9 | 16S-4 | 16-11 | 16-13 | 16-52 |
|---|---|---|---|---|---|---|
| Insert Arrangement | 10SL-4 | 14S-9 | 16S-4 | 16-11 | 16-13 | 16-52 |
| Number of Contacts | 2 | 2 | 2 | 2 | 2 | 2 |
| Size of Contacts | 16 | 16 | 16 | 12 | 12 | 12 |
| Service Rating | A | A | D | A | A<br>A=Iron<br>B=Constantan | A<br>A=Alumel<br>B=Chromel |

| | 18-3 | 18-14 | 20-23 | 22-1 | 22-8 | 22-11 |
|---|---|---|---|---|---|---|
| Insert Arrangement | 18-3 | 18-14 | 20-23 | 22-1 | 22-8 | 22-11 |
| Number of Contacts | 2 | 2 | 2 | 2 | 2 | 2 |
| Size of Contacts | 12 | 1-4, 1-16 | 8 | 8 | 12 | 16 |
| Service Rating | D | A | A | D | E | B |

| | 24A-2P (FT) | 24-9 | 32A-2 | 32D-2 | 32-5 |
|---|---|---|---|---|---|
| Insert Arrangement | 24A-2P (FT) | 24-9 | 32A-2 | 32D-2 | 32-5 |
| Number of Contacts | 2 | 2 | 2 | 2 | 2 |
| Size of Contacts | 12 | 4 | 1-4/0, 1-16 | 1-12, 1-4/0 | 0 |
| Service Rating | HV (4200V DC) | A | D | A | D |

Specifications and dimensions subject to change
Dimensions shown in mm.

## *Front View of Male Insert 2-4 Contacts*

**Contact Legend**

20 18 16 16HV 12 12HV 8 4 0 4/0

| | 36A-2 | 40A-2 | 10SL-3 | 10SL-55 | 14S-1 |
|---|---|---|---|---|---|
| Insert Arrangement | 2 | 2 | 3 | 3 | 3 |
| Number of Contacts | 0 | 1-8, 1-4/0 | 16 | 16 | 16 |
| Size of Contacts | A | D | A | 1 (A=Alumel B=Chromel) | A |
| Service Rating | | | | | |

| | 14S-7 | 14S-12 | 16S-5 | 16-7 | 16-10 |
|---|---|---|---|---|---|
| Insert Arrangement | 3 | 3 | 3 | 3 | 3 |
| Number of Contacts | 16 | 16 | 16 | 1-8, 2-16 | 12 |
| Size of Contacts | A | A (14S-1 rotated by 100°) | A | A | A |
| Service Rating | | | | | |

| | 18-5 | 18-22 | 20-3 | 20-19 | 22-2 |
|---|---|---|---|---|---|
| Insert Arrangement | 3 | 3 | 3 | 3 | 3 |
| Number of Contacts | 2-12, 1-16 | 16 | 12 | 8 | 8 |
| Size of Contacts | D | D | D | A | D |
| Service Rating | | | | | |

| | 22-6 | 22-9 | 22-21 | 28-3 | 28P-3* |
|---|---|---|---|---|---|
| Insert Arrangement | 3 | 3 | 3 | 3 | 3 |
| Number of Contacts | 2-8, 1-16 | 12 | 1-0, 2-16 | 8 | 8 |
| Size of Contacts | D | E | A | E | C |
| Service Rating | | | | | |

| | 28-6 | 32A-3 | 14S-2 | 14S-10 | 16-9 |
|---|---|---|---|---|---|
| Insert Arrangement | 3 | 3 | 4 | 4 | 4 |
| Number of Contacts | 4 | 4 | 16 | 16 | 2-12, 2-16 |
| Size of Contacts | D | B | I | I (14S-2 rotated by 100°) | A |
| Service Rating | | | | | |

**With protection front and rear.*

ITT

Specifications and dimensions subject to change
Dimensions shown in mm.

## *Front View of Male Insert 4-5 Contacts*

**Contact Legend**

20 18 16 16HV 12 12HV 8 4 0 4/0

| Insert Arrangement | 18-4 | 18-10 | 18-13 | 20-4 | 20-24 |
|---|---|---|---|---|---|
| Number of Contacts | 4 | 4 | 4 | 4 | 4 |
| Size of Contacts | 16 | 12 | 1-8, 3-12 | 12 | 2-8, 2-16 |
| Service Rating | D | A | A | D | A |

| Insert Arrangement | 22-4 | 22-22 | 24-22 | 32-17 |
|---|---|---|---|---|
| Number of Contacts | 4 | 4 | 4 | 4 |
| Size of Contacts | 2-8, 2-12 | 8 | 8 | 4 |
| Service Rating | A | A | D | D |

| Insert Arrangement | 36-5 | 40D-4 | 14S-5 | 16S-8 |
|---|---|---|---|---|
| Number of Contacts | 4 | 4 | 5 | 5 |
| Size of Contacts | 0 | 8 | 16 | 16 |
| Service Rating | A | C | I | A |

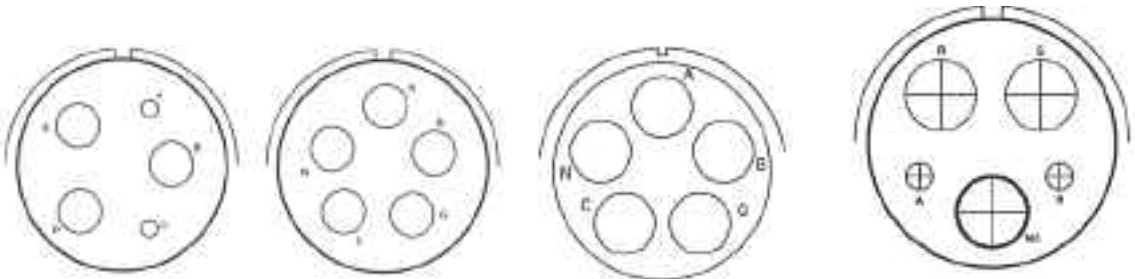
| Insert Arrangement | 18-11 | 18-20 | 18-30 | 18-31 | 22-12 |
|---|---|---|---|---|---|
| Number of Contacts | 5 | 5 | 5 | 5 | 5 |
| Size of Contacts | 12 | 16 | 16 | 16 | 2-8, 3-16 |
| Service Rating | A | A | A | A | D |
| | | | (18-20 rotated by 110°) | (18-20 rotated by 260°) | |

Specifications and dimensions subject to change
Dimensions shown in mm.

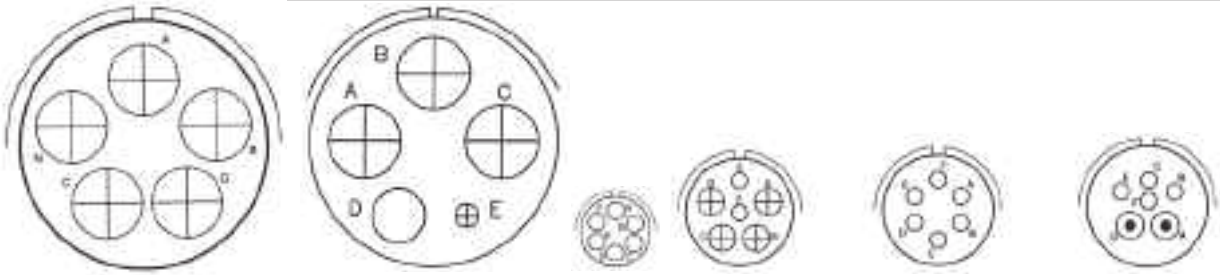
**Contact Legend**

20 18 16 16HV 12 12HV 8 4 0 4/ 0

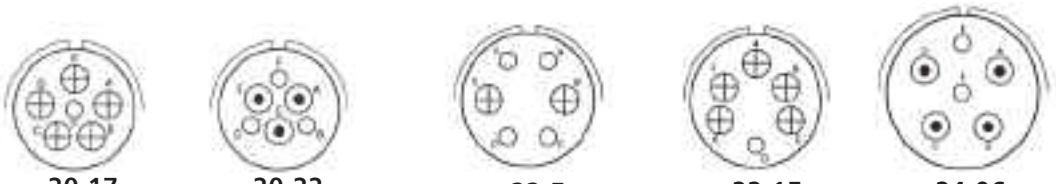
| | 22-34 | 24-12 | 28-5 | 28A-5GM | 32-1 |
|---|---|---|---|---|---|
| Number of Contacts | 5 | 5 | 5 | 5 | 5 |
| Size of Contacts | 3-12, 2-16 | 2-4, 3-12 | 2-4, 1-12, 2-16 | 8 | 2-0, 3-12 |
| Service Rating | D | A | D | A | A=E;B,C,D,E=D |



| | 32-2 | 32A-5GM | 32B-5GM | 40A-3 |
|---|---|---|---|---|
| Number of Contacts | 5 | 5 | 5 | 5 |
| Size of Contacts | 3-4, 2-16 | 4 | 4 | 1-0M, 2-0, 2-12 |
| Service Rating | E | A | A | E |



| | 40A-5 GM | 40B-5 | 14S-6 | 18-06 | 18-12 | 20-8 |
|---|---|---|---|---|---|---|
| Number of Contacts | 5 | 5 | 6 | 6 | 6 | 6 |
| Size of Contacts | 0 | 3-0, 1-4, 1-12 | 16 | 4-12, 2-16 | 16 | 2-8, 4-16 |
| Service Rating | A | A | I | A | A | I |



| | 20-17 | 20-22 | 22-5 | 22-15 | 24-06 |
|---|---|---|---|---|---|
| Number of Contacts | 6 | 6 | 6 | 6 | 6 |
| Size of Contacts | 5-12, 1-16 | 3-8, 3-16 | 2-12, 4-16 | 5-12, 1-16 | 4-8, 2-16 |
| Service Rating | A | A | D | D=E;A,B,C,E,F=A | D |

**Contact Legend**

| | 24A-6* | 28A-6 | 28-22 | 32A-6 | 36-3 |
|---|---|---|---|---|---|
| Insert Arrangement | 6 | 6 | 6 | 6 | 6 |
| Number of Contacts | 2-8, 4-12 | 1-4, 4-8, 1-16 | 3-4, 3-16 | 2-4, 4-12 | 3-0, 3-12 |
| Size of Contacts | D | A | D | E | D |
| Service Rating | | | | | |

| | 36-6 | 36B-6 | 36A-51 | 36A-61 |
|---|---|---|---|---|
| Insert Arrangement | 6 | 6 | 6 | 6 |
| Number of Contacts | 2-0, 4-4 | 3-8, 1-12, 2-16 | 3-0, 2-4, 1-16 | 2-4, 4-12 |
| Size of Contacts | A | B | D | E |
| Service Rating | | | | |

| | 36B-61 | 40A-4 | 14SA-7 | 16S-1 |
|---|---|---|---|---|
| Insert Arrangement | 6 | 6 | 7 | 7 |
| Number of Contacts | 2-4, 4-12 | 1-0M, 3-0, 2-12 | 16 | 16 |
| Size of Contacts | E | A | I | A |
| Service Rating | | | | |

| | 18-9 | 18-17 | 20A-7 | 20-15 | 22-28 |
|---|---|---|---|---|---|
| Insert Arrangement | 7 | 7 | 7 | 7 | 7 |
| Number of Contacts | 2-12, 5-16 | 2-12, 5-16 | 18 | 12 | 12 |
| Size of Contacts | I | I | D | A | A |
| Service Rating | | | | | |

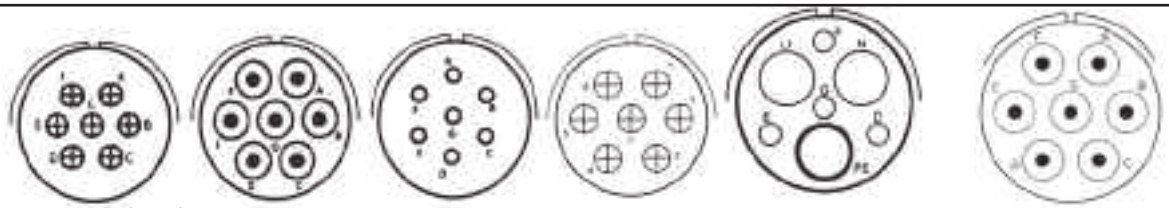
(18-9 rotated by 100°)

Specifications and dimensions subject to change
Dimensions shown in mm.

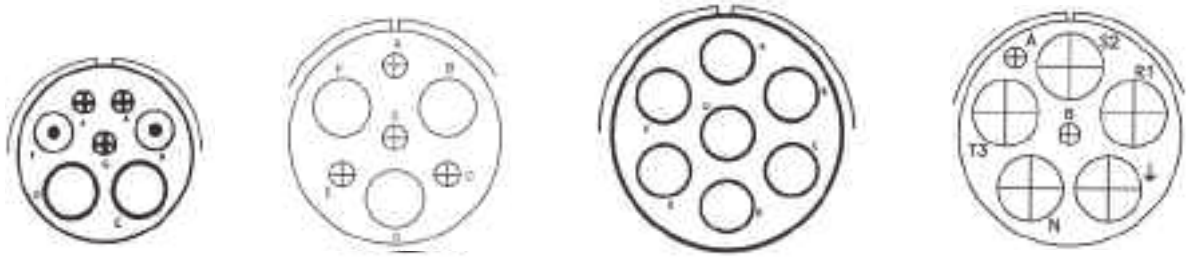
## *Front View of Male Insert 7-8 Contacts*

**Contact Legend**

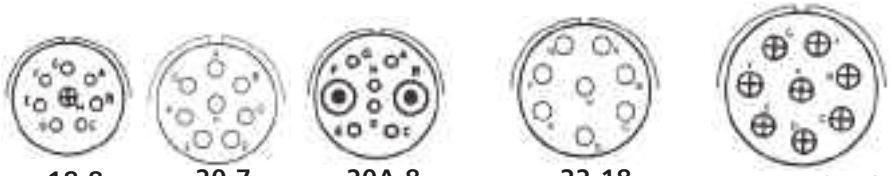
| 20 | 18 | 16 | 16HV | 12 | 12HV | 8 | 4 | 0 | 4/0 |
|---|---|---|---|---|---|---|---|---|---|



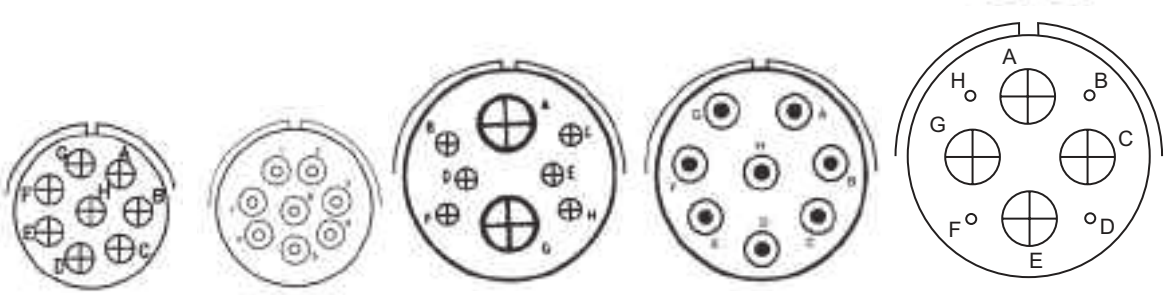
| Insert Arrangement | 24-2 (GM) | 24-10 | 24-27 | 24A-7 | 28A-7 | 28B-7 |
|---|---|---|---|---|---|---|
| Number of Contacts | 7 | 7 | 7 | 7 | 7 | 7 |
| Size of Contacts | 12 | 8 | 16 | 12 | 2-4, 1-4M, 4-16 | 8 |
| Service Rating | D | A | E | D | A | A |



| Insert Arrangement | 28-10 | 32A-7 | 36-77 | 40A-7 |
|---|---|---|---|---|
| Number of Contacts | 7 | 7 | 7 | 7 |
| Size of Contacts | 2-4, 2-8, 3-12 | 3-4, 4-12 | 4 | 5-0, 2-12 |
| Service Rating | G=D;BAL.=A | D | D | A |



| Insert Arrangement | 18-8 | 20-7 | 20A-8 | 22-18 | 24-6 (HM) |
|---|---|---|---|---|---|
| Number of Contacts | 8 | 8 | 8 | 8 | 8 |
| Size of Contacts | 1-12, 7-16 | 16 | 2-8, 6-16 | 16 | 12 |
| Service Rating | A | A,B,H,G=D; C,D,E,F=A | I | A,B,F,G,H=D; C,D,E=A | A,G,H=D;BAL.=A |




| Insert Arrangement | 22-23 | 24A-8 (FT) | 32-15 | 32A-8 | 40A-8 |
|---|---|---|---|---|---|
| Number of Contacts | 8 | 8 | 8 | 8 | 8 |
| Size of Contacts | 12 | 16 | 2-0, 6-12 | 8 | 4-0, 4-16 |
| Service Rating | H=D;BAL.=A | HV=15KV | D | A | E |

**Contact Legend**

| | 40A-10 | 20-16 | 20-18 | 20-21 | 20A-9 |
|---|---|---|---|---|---|
| Insert Arrangement | 8 | 9 | 9 | 9 | 9 |
| Number of Contacts | 4-4, 4-16 | 2-12, 7-16 | 3-12, 6-16 | 1-12, 8-16 | 12 |
| Size of Contacts | D | A | A | A | J=D;BAL.=I |
| Service Rating | | | | | |

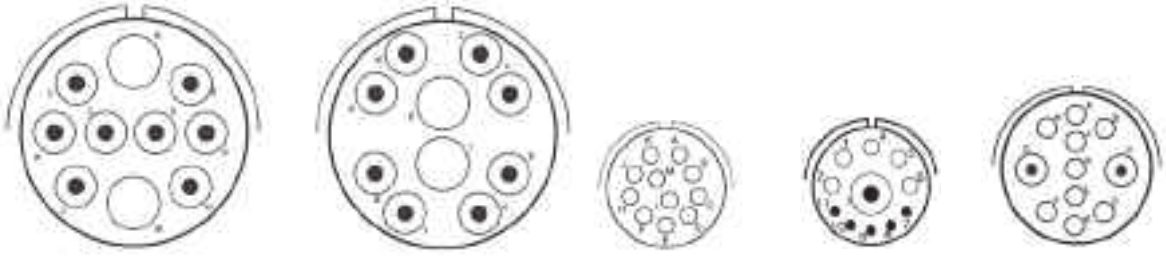
| | 22A-9 | 22-17 | *22-27* | 24-11 (EM) | 28-1 |
|---|---|---|---|---|---|
| Insert Arrangement | 9 | 9 | 9 | 9 | 9 |
| Number of Contacts | 16 | 1-12, 8-16 | 1-8, 8-16 | 3-8, 6-12 | 3-8, 6-12 |
| Size of Contacts | 1,2,3=D;BAL.=A | A=D;BAL.=A | J=D;BAL.=A | A | A,J,E=D;BAL.=A |
| Service Rating | | | | | |

| | 28A-9/28B-9 | 16A-10 | 18-1 | 18-19 | 18-24 | 22A-10 |
|---|---|---|---|---|---|---|
| Insert Arrangement | 9 | 10 | 10 | 10 | 10 | 10 |
| Number of Contacts | 4-4, 5-16 | 18 | 16 | 16 | 16 | 16 |
| Size of Contacts | A | A | B,C,F,G=A;BAL.=I | A | B,C,F,G=A;BAL.=I | A |
| Service Rating | | | | | (18-1 rotated by 250°) | |

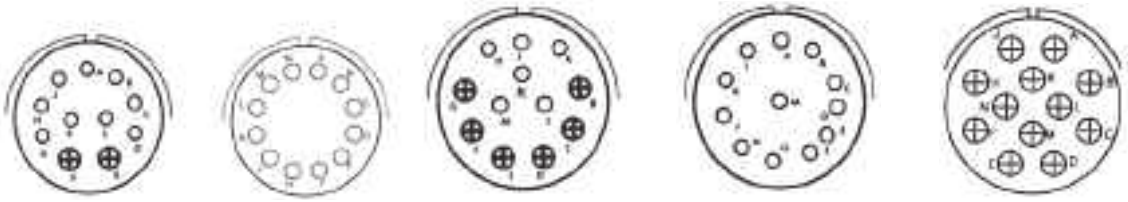
| | 22B-10 | 24-21 | 28-19 | 28A-10 | 32A-10 |
|---|---|---|---|---|---|
| Insert Arrangement | 10 | 10 | 10 | 10 | 10 |
| Number of Contacts | 2-8, 8-16 | 1-8, 9-16 | 4-12, 6-16 | 12 | 2-4, 8-8 |
| Size of Contacts | A | D | H,M=B;A,B=D;BAL.=A | D | A |
| Service Rating | | | | | |

**Consult Customer Service.*

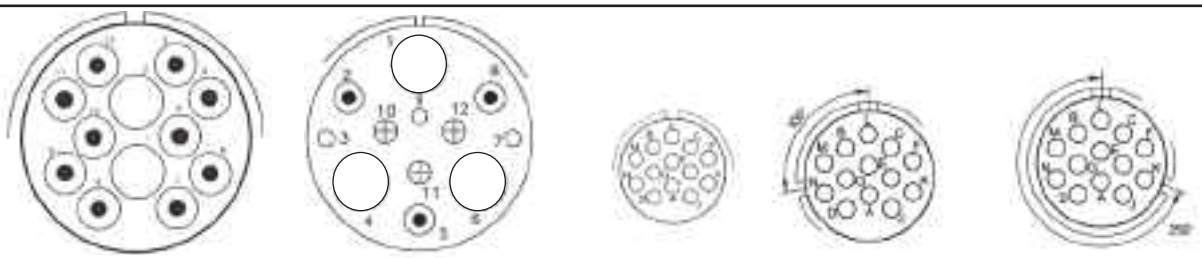
**Contact Legend**



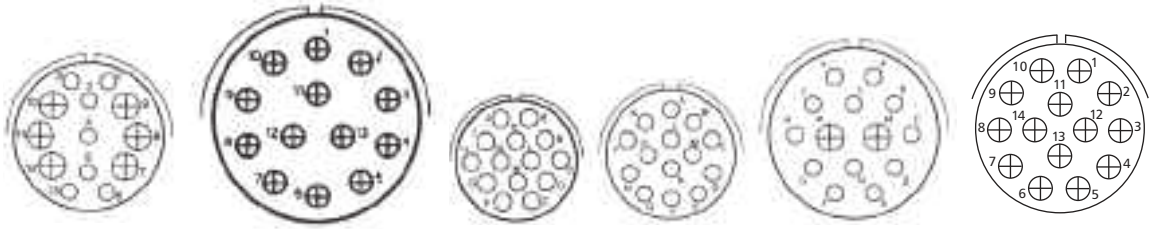
| | 36A-10 | 36B-10 | 20-33 | 20A-11 | 24A-11 |
|---|---|---|---|---|---|
| Number of Contacts | 10 | 10 | 11 | 11 | 11 |
| Size of Contacts | 2-4, 8-8 | 2-4, 8-8 | 16 | 5-20, 1-8, 5-16 | 2-8, 9-16 |
| Service Rating | A | A | A | A | **A** |



| | 24-20 | 24-19 | 28-9 | 28-18 | 28-51 |
|---|---|---|---|---|---|
| Number of Contacts | 11 | 12 | 12 | 12 | 12 |
| Size of Contacts | 2-12, 9-16 | 16 | 6-12, 6-16 | 16 | 12 |
| Service Rating | D | A | D | M=C;G,H,J,K,L=D<br>A,B=A;BAL.=I | D |

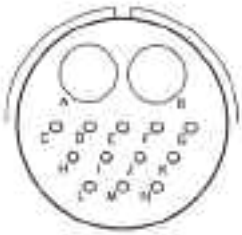
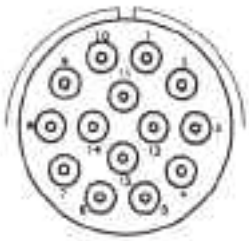
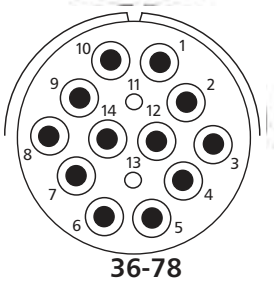


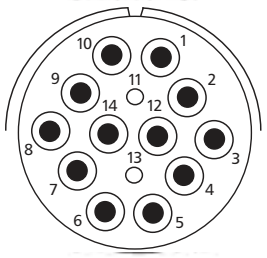
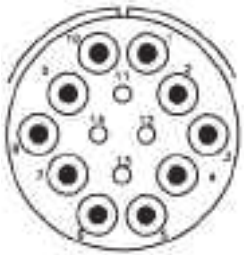
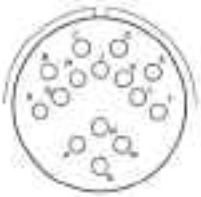
| | 36A-12 | 36B-12 | 20-11 | 20-25 | 20-30 |
|---|---|---|---|---|---|
| Number of Contacts | 12 | 12 | 13 | 13 | 13 |
| Size of Contacts | 2-4, 10-8 | 3-4, 3-8, 3-12; 3-16 | 16 | 16 | 16 |
| Service Rating | A | D | I | I | I |
| | | | | (20-11 rotated by 100°) | (20-11 rotated by 250°) |

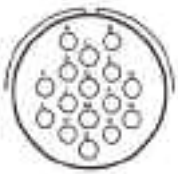
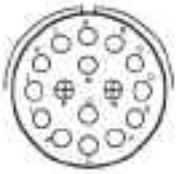
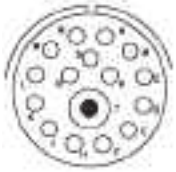
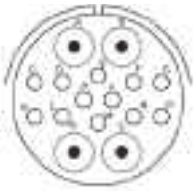
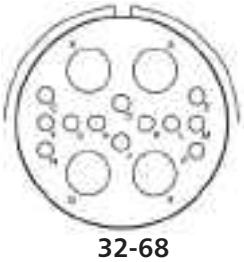


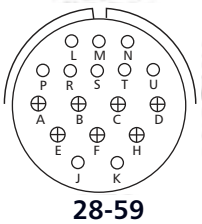
| | 24-013 | 32A-13 | 20-27 | 22-19 | 28-2 | 28A-14 |
|---|---|---|---|---|---|---|
| Number of Contacts | 13 | 13 | 14 | 14 | 14 | 14 |
| Size of Contacts | 6-12, 7-16 | 12 | 16 | 16 | 2-12, 12-16 | 12 |
| Service Rating | A | D | A | A | D | D |

**Contact Legend**

| | | | | |
|---|---|---|---|---|
| | |  |  |  |
| **Insert Arrangement** | **28-20** | **32-9** | **32A-14 (ft)** | **36-78** |
| **Number of Contacts** | 14 | 14 | 14 | 14 |
| **Size of Contacts** | 10-12, 4-16 | 2-4, 12-16 | 16 | 12-8, 2-16 |
| **Service Rating** | A | D | HV (6 KVAC) | D |

| | | | | |
|---|---|---|---|---|
| |  |  | |  |
| **Insert Arrangement** | **36B-78** | **36D-78** | **40A-14** | **28-17** |
| **Number of Contacts** | 14 | 14 | 14 | 15 |
| **Size of Contacts** | 12-8, 2-16 | 10-8, 4-16 | 8-4, 6-12 | 16 |
| **Service Rating** | D | D | A | R=B;M,N,P=D<br>BAL.=A |

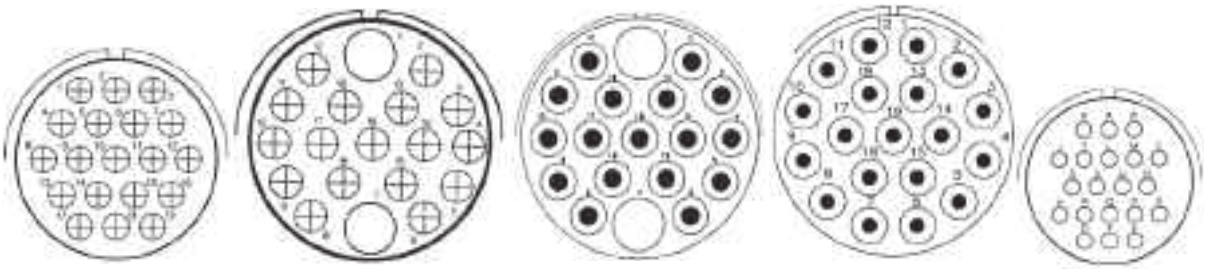
| | | | | | | |
|---|---|---|---|---|---|---|
| | |  |  |  |  |  |
| **Insert Arrangement** | **22A-16** | **24-5** | **24-7** | **24A-16** | **28A-16** | **32-68** |
| **Number of Contacts** | 16 | 16 | 16 | 16 | 16 | 16 |
| **Size of Contacts** | 16 | 16 | 2-12, 14-16 | 1-8, 15-16 | 4-8, 12-16 | 4-4, 12-16 |
| **Service Rating** | I | A | A | E | A | A |

| | | | | | |
|---|---|---|---|---|---|
| | |  | | | |
| **Insert Arrangement** | **20-29** | **28-59** | **20A-48** | **22-14** | **24-67** |
| **Number of Contacts** | 17 | 17 | 19 | 19 | 19 |
| **Size of Contacts** | 16 | 7-12, 10-16 | 16 | 16 | 12 |
| **Service Rating** | A | A | I | A | A |

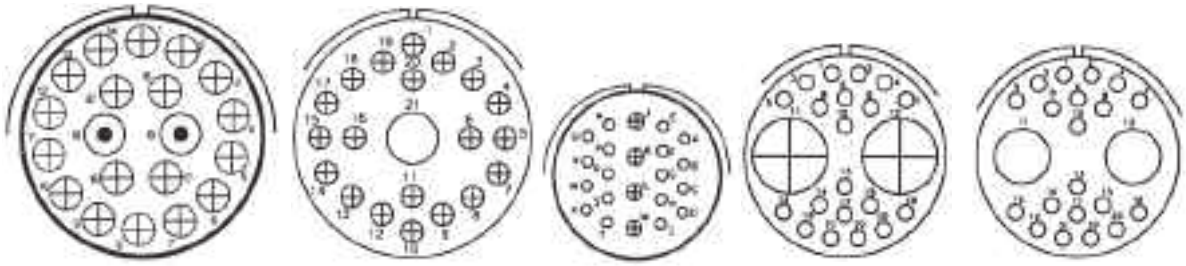
Specifications and dimensions subject to change
Dimensions shown in mm.

## *Front View of Male Insert 19-25 Contacts*

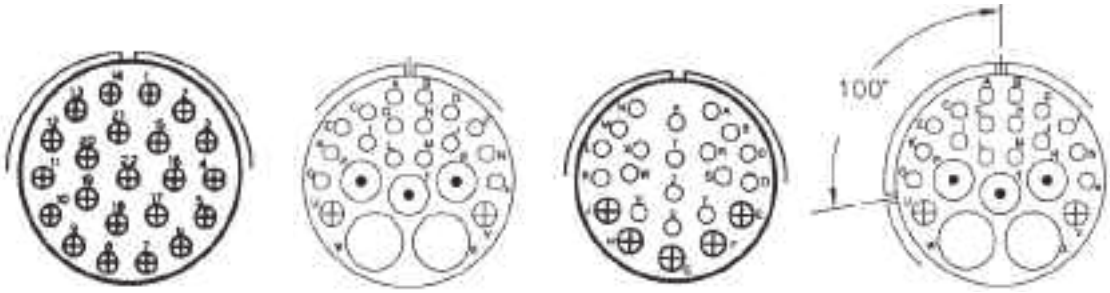
**Contact Legend**



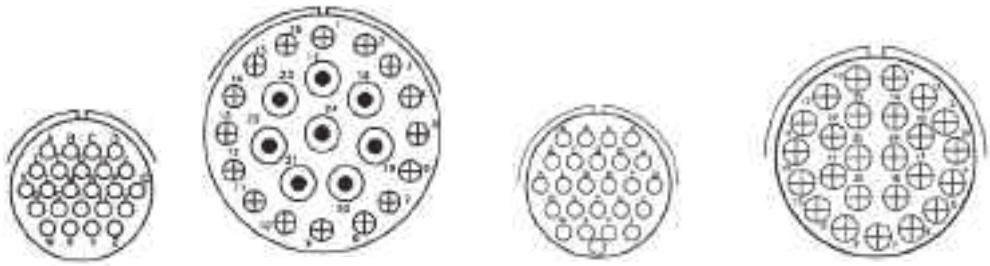
| Insert Arrangement | 32-76 | 40-19 | 40A-19 | 40B-19 | 28-16 |
|---|---|---|---|---|---|
| Number of Contacts | 19 | 19 | 19 | 19 | 20 |
| Size of Contacts | 12 | 2-4, 17-12 | 2-4, 17-8 | 8 | 16 |
| Service Rating | A | A | A | A | A |



| Insert Arrangement | 40A-20 | 40A-21 | 28-11 | 32A-22 | 32B-22 |
|---|---|---|---|---|---|
| Number of Contacts | 20 | 21 | 22 | 22 | 22 |
| Size of Contacts | 2-8, 18-12 | 1-4, 20-12 | 4-12, 18-16 | 2-0, 20-16 | 2-4, 20-16 |
| Service Rating | D | 21=D;BAL.=A | A | A | A |



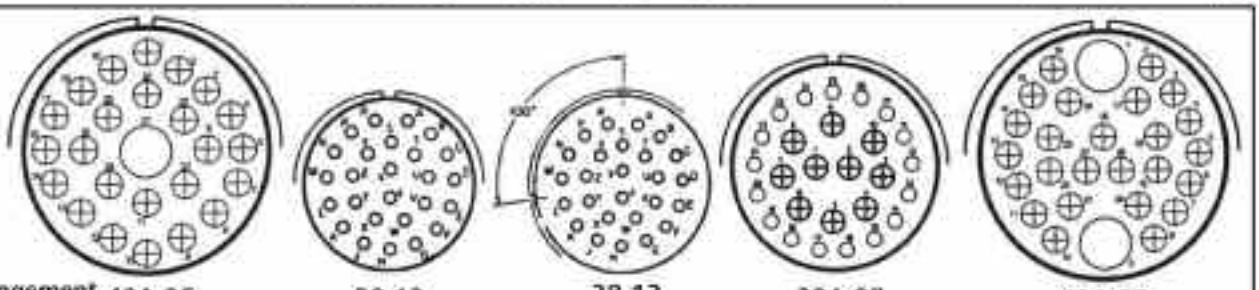

| Insert Arrangement | 36A-22 | 32-6 | 32-13 | 32-16 |
|---|---|---|---|---|
| Number of Contacts | 22 | 23 | 23 | 23 |
| Size of Contacts | 12 | 2-4, 3-8, 2-12, 16-16 | 5-12, 18-16 | 2-4, 3-8, 2-12, 16-16 |
| Service Rating | D | A | D | A (32-6 rotated by 100º) |



| Insert Arrangement | 24-28 | 40A-24 | 24A-25 | 32A-25 |
|---|---|---|---|---|
| Number of Contacts | 24 | 24 | 25 | 25 |
| Size of Contacts | 16 | 8-8, 16-12 | 16 | 12 |
| Service Rating | I | D | I | A |

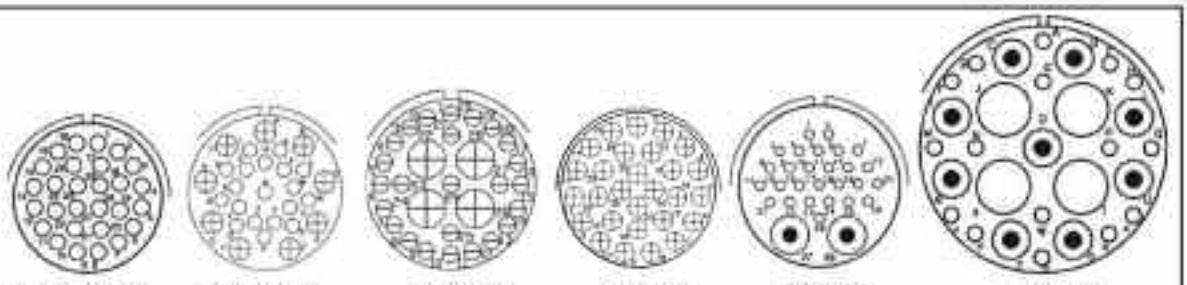
## *Front View of Male Insert 25-31 Contacts*

Contact Legend

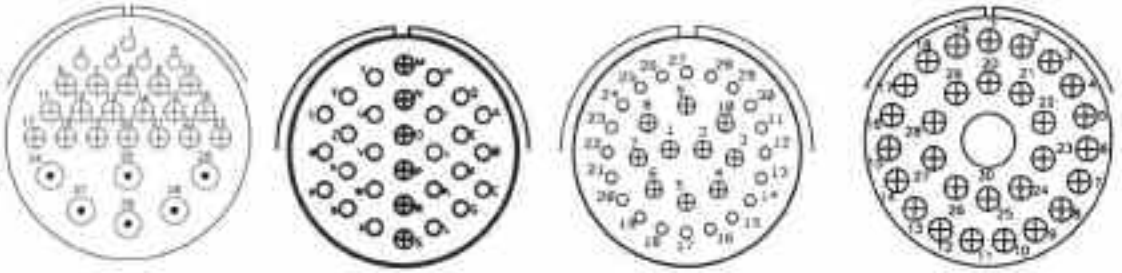


| Insert Arrangement | 40A-25 | 28-12 | 28-13 | 32A-27 | 40A-27 |
|---|---|---|---|---|---|
| Number of Contacts | 25 | 26 | 26 | 27 | 27 |
| Size of Contacts | 1-4, 24-12 | 16 | 16 | 10-12, 17-16 | 2-4, 25-12 |
| Service Rating | A | A | A | A | A |

(28-12 rotated by 100°)



| Insert Arrangement | 24A-28 | *28A-63* | 20A-29 | 32A-28 | 28A-29 | 40-10 |
|---|---|---|---|---|---|---|
| Number of Contacts | 28 | 28 | 29 | 28 | 29 | 29 |
| Size of Contacts | 16 | 9-12, 19-16 | 4-12, 25-18 | 12 | 2-8, 27-16 | 4-4, 9-8, 16-16 |
| Service Rating | I | e=A;BAL.=I | I | A | A | A |



| Insert Arrangement | 40A-29 | 32-8 | 32A-30 | 40A-30 |
|---|---|---|---|---|
| Number of Contacts | 29 | 30 | 30 | 30 |
| Size of Contacts | 5-16; 18-12; 6-8 | 6-12, 24-16 | 10-12, 20-16 | 1-4, 29-12 |
| Service Rating | A | A | A | A |

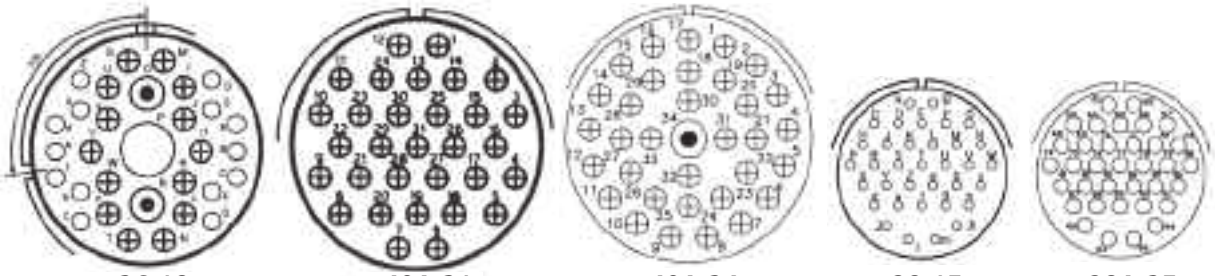
| Insert Arrangement | 28-31 | 28A-31 | 32-31 | 32A-31 | 36-9 |
|---|---|---|---|---|---|
| Number of Contacts | 31 | 31 | 31 | 31 | 31 |
| Size of Contacts | 6-8, 25-20 | 6-8, 25-20 | 16 | 18-12, 13-16 | 1-4, 2-8; 14-12, 14-16 |
| Service Rating | I | I | A | A | A |

Specifications and dimensions subject to change
Dimensions shown in mm.

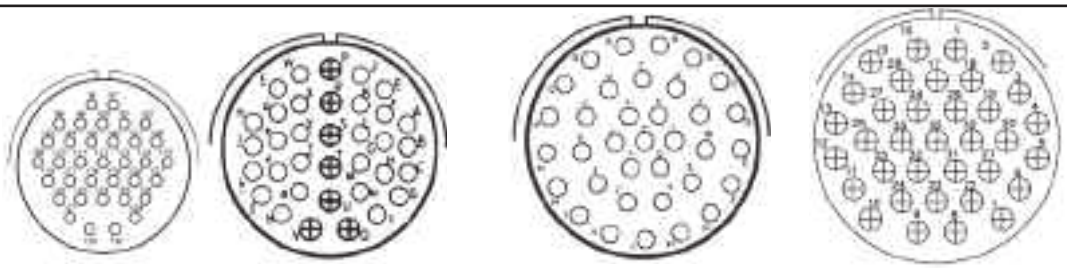
## *Front View of Male Insert 31-47 Contacts*

**Contact Legend**

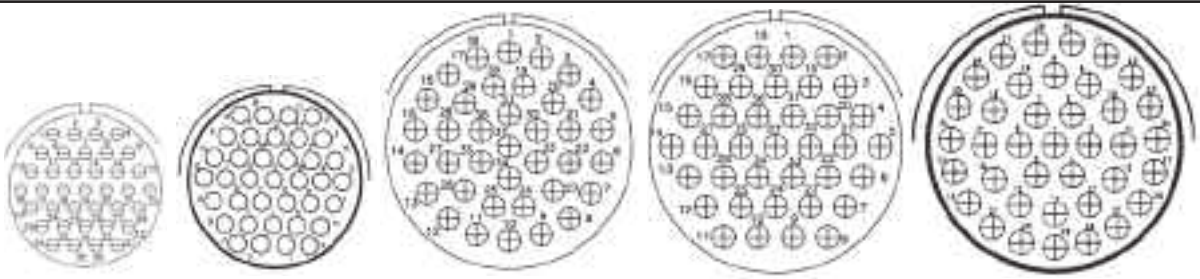
20 18 16 16HV 12 12HV 8 4 0 4/0



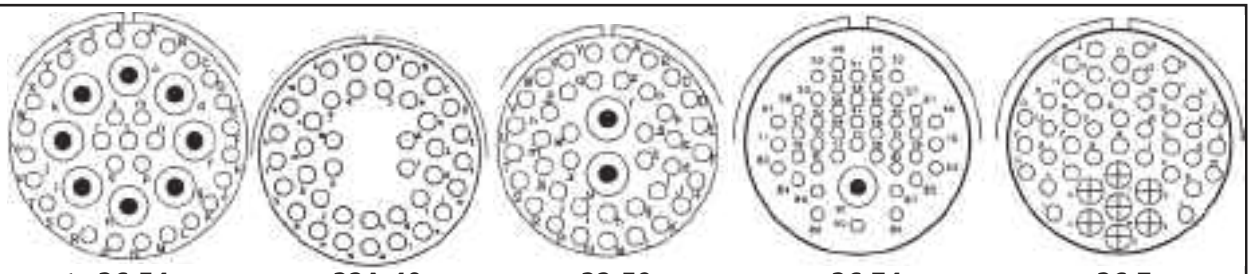
| | 36-18 | 40A-31 | 40A-34 | 28-15 | 28A-35 |
|---|---|---|---|---|---|
| Insert Arrangement | | | | | |
| Number of Contacts | 31 | 31 | 34 | 35 | 35 |
| Size of Contacts | 1-4, 2-8, 14-12, 14-16 | 12 | 1-8, 33-12 | 16 | 16 |
| Service Rating | A | D | I | A | A |
| | (36-9 rotated by 100°) | | | | |



| | 28B-35 | 32-7 | 36-15 | 40A-35 |
|---|---|---|---|---|
| Insert Arrangement | | | | |
| Number of Contacts | 35 | 35 | 35 | 35 |
| Size of Contacts | 16 | 7-12, 28-16 | 16 | 12 |
| Service Rating | A | A,B,h,j=I;BAL.=A | A | D |
| | | | M=D;BAL.=A | |

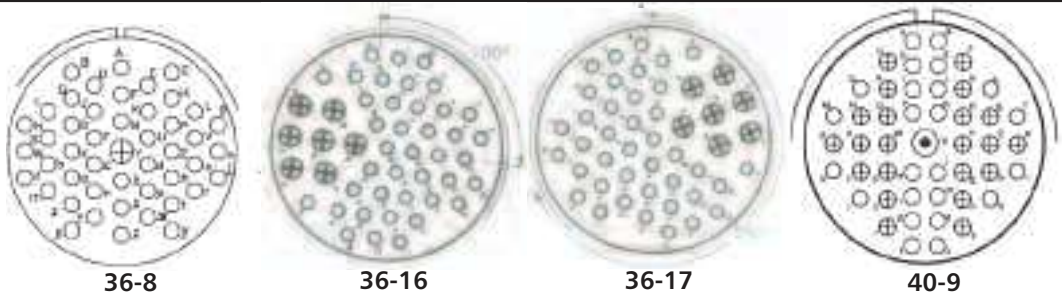


| | 22A-37 | 28-21 | 40B-37 | 40D-37 | 40A-38 |
|---|---|---|---|---|---|
| Insert Arrangement | | | | | |
| Number of Contacts | 37 | 37 | 37 | 37 | 38 |
| Size of Contacts | 18 | 16 | 12 | 12 | 12 |
| Service Rating | A | A | A | A | A |

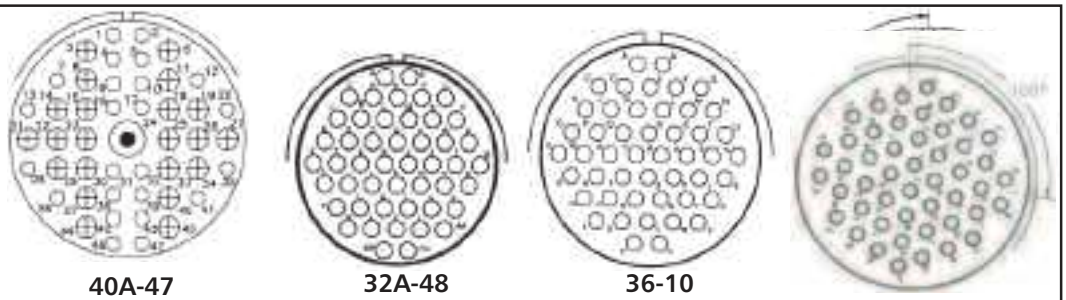


| | 36-54 | 32A-40 | 32-59 | 36-74 | 36-7 |
|---|---|---|---|---|---|
| Insert Arrangement | | | | | |
| Number of Contacts | 39 | 40 | 42 | 44 | 47 |
| Size of Contacts | 8-8, 31-16 | 16 | 2-8, 40-16 | 1-8, 43-16 | 7-12, 40-16 |
| Service Rating | A | A | A | A | A |

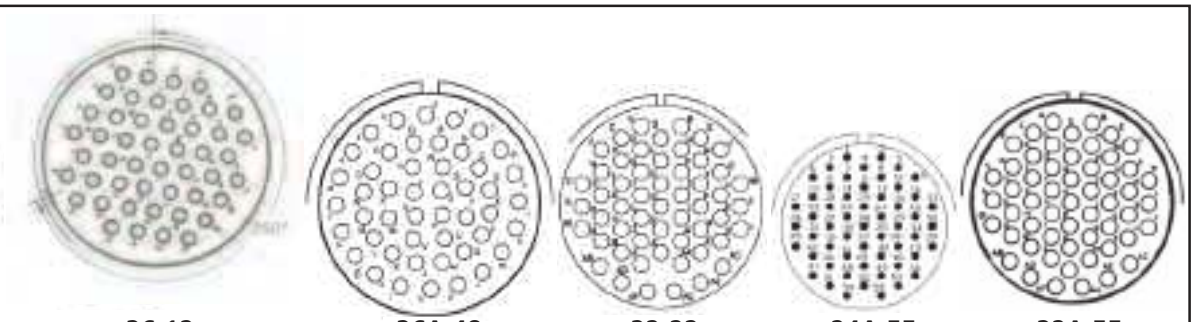
**Contact Legend**



| | 36-8 | 36-16 | 36-17 | 40-9 |
|---|---|---|---|---|
| Insert Arrangement | 47 | 47 | 47 | 47 |
| Number of Contacts | 1-12, 46-16 | 7-12, 40-16 | 7-12, 40-16 | 1-8, 22-12, 24-16 |
| Size of Contacts | A | A | A | A |
| Service Rating | | (36-7 rotated by 100°) | (36-7 rotated by 250°) | |



| | 40A-47 | 32A-48 | 36-10 | |
|---|---|---|---|---|
| Insert Arrangement | 47 | 48 | 48 | 48 |
| Number of Contacts | 1-8, 22-12, 24-16 | 16 | 16 | 16 |
| Size of Contacts | A | I | A | A |
| Service Rating | | | | (36-10 rotated by 100°) |



| | 36-12 | 36A-48 | 32-22 | 24A-55 | 32A-55 |
|---|---|---|---|---|---|
| Insert Arrangement | 48 | 48 | 54 | 55 | 55 |
| Number of Contacts | 16 | 16 | 16 | 20 | 16 |
| Size of Contacts | A (36-10 rotated by 250°) | I | A | I | A |
| Service Rating | | | | | |

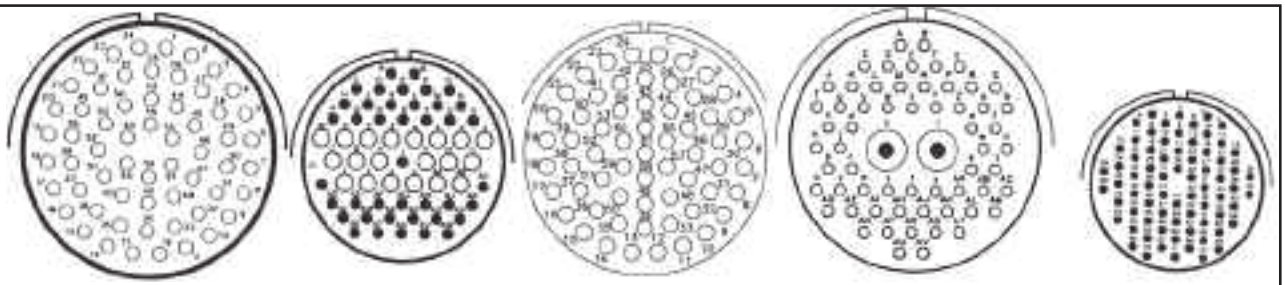
| | 40-55 | 36-66 | 40-58 |
|---|---|---|---|
| Insert Arrangement | 55 | 56 | 58 |
| Number of Contacts | 1-8, 19-12, 35-16 | 4-12, 52-16 | 1-8, 19-12, 38-16 |
| Size of Contacts | I | A | I |
| Service Rating | | | |

Specifications and dimensions subject to change
Dimensions shown in mm.

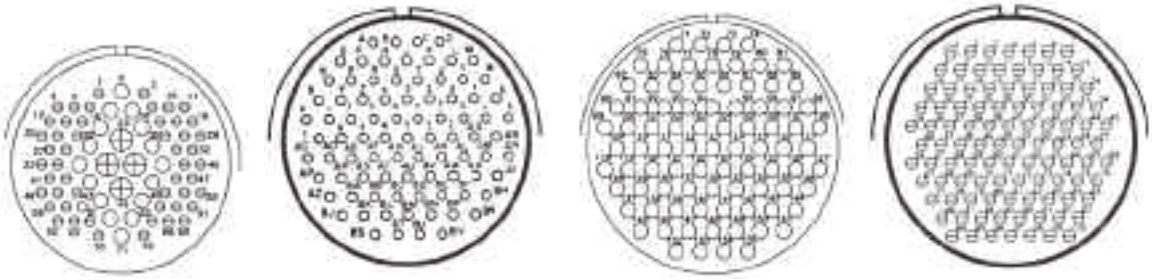
## *Front View of Male Insert 60-159 Contacts*

**Contact Legend**

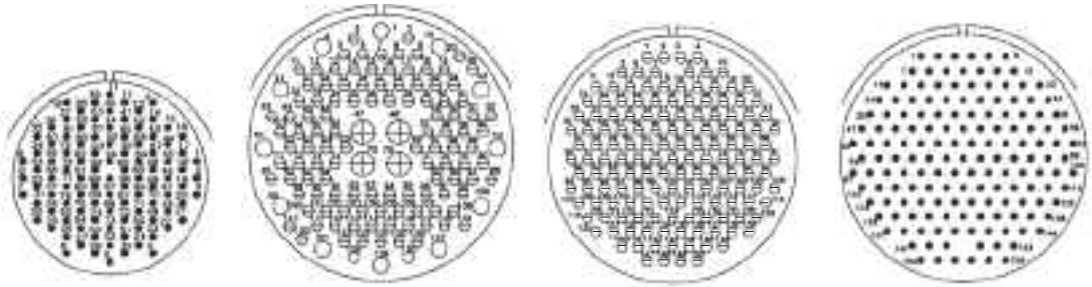
| 20 | 18 | 16 | 16HV | 12 | 12HV | 8 | 4 | 0 | 4/0 |
|---|---|---|---|---|---|---|---|---|---|



| | | | | | |
|---|---|---|---|---|---|
| **Insert Arrangement** | **40A-60** | ***32A-69*** | **40-63** | **40A-62** | **28-72** |
| **Number of Contacts** | 60 | 61 | 61 | 62 | 72 |
| **Size of Contacts** | 16 | 20-16, 41-20 | 16 | 60-16, 2-8 | 20 |
| **Service Rating** | A | A | A | A | I |



| | | | | |
|---|---|---|---|---|
| **Insert Arrangement** | **36A-72** | **40-56** | **40A-56** | **40A-100** |
| **Number of Contacts** | 72 | 85 | 85 | 100 |
| **Size of Contacts** | 4-12, 16-16, 52-18 | 16 | 16 | 18 |
| **Service Rating** | I | A | A | A |



| | | | | |
|---|---|---|---|---|
| **Insert Arrangement** | **32-101** | **40A-130** | **40A-150** | **40T-159** |
| **Number of Contacts** | 101 | 130 | 150 | 159 |
| **Size of Contacts** | 20 | 4-12, 12-16, 114-18 | 18 | 20 |
| **Service Rating** | I | I | I | A |

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 10SL-51 | 10SL-4 | 2 | | 2 | 45° | A=Fe; B=Co |
| 10SL-52 | 10SL-4 | 2 | | 2 | 45° | A=Cu; B=Co |
| 10SL-53 | 10SL-4 | 2 | | 2 | 45° | A=Al; B=CH |
| 10SL-54 | 10SL-3 | 3 | | 3 | None | A=Fe, B=Co; C=Cu |
| 10SL-55 | 10SL-3 | 3 | | 3 | None | A=Al; B=CH; C=Cu |
| 10SL-56 | 10SL-4 | 2 | | 2 | None | A=Al; B=CH |
| 14S-51 | 14S-9 | 2 | | 2 | 90° | A=Al; B=CH |
| 14S-52 | 14S-2 | 4 | | 4 | 45° | A, B=Cu; C=Al; D=CH |
| 14S-53 | 14S-9 | 2 | | 2 | 90° | A=Fe; B=Co |
| 14S-54 | 14S-6 | 6 | | 6 | 45° | A, C, E=Fe; B, D, F=Co |
| 14S-55 | 14S-2 | 4 | | 4 | 45° | A, C=Fe; B, D=Co |
| 14S-56 | 14S-2 | 4 | | 4 | 45° | A=Fe; B=Co; C, D=Cu |
| 14S-57 | 14S-2 | 4 | | 4 | 45° | A, C=Al; B, D=CH |
| 14S-58 | 14S-7 | 3 | | 3 | 45° | A=Al, B=CH; C=Cu |
| 14S-59 | 14S-9 | 2 | | 2 | 90° | A=Cu; B=Co |
| 14S-60 | 14S-9 | 2 | | 2 | none | A=Al; B=CH |
| 14S-61 | 14S-6 | 6 | | 6 | 45° | A=Al; B=CH; C=Fe; D=Co; E, F=Cu |
| 14S-63 | 14S-6 | 6 | | 6 | None | A, C=Al; B, D=CH; E=Fe; F=Co |
| 14S-64 | 14S-2 | 4 | | 4 | None | A, C=Co; B, D=Cu |
| 14S-65 | 14S-6 | 6 | | 6 | None | A, C, E=Cu; B, D, F=Co |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 14S-67 | 14S-6 | 6 | | 6 | None | A=Al; B=CH; Balance=Cu |
| 14S-68 | 14S-2 | 4 | | 4 | 45° | A=CH; B=Co; C, D=Cu |
| 14S-69 | 14S-7 | 3 | | 3 | None | A=Co; B=CH; C=Cu |
| 14S-70 | 14S-2 | 4 | | 4 | None | D=Al; A=CH; Balance=Cu (crimp type) |
| 14S-71 | 14S-2 | 4 | | 4 | None | n. 2=CH; n. 2=Co |
| 14S-72 | 14S-2 | 4 | | 4 | None | A, C=Fe; B, D=Co |
| 14S-73 | 14S-2 | 4 | | 4 | None | A, C=CH; B-D=Al |
| 14S-74 | 14S-2 | 4 | | 4 | None | A=Al; B=CH; Balance=Cu |
| 14S-75 | | | | | | |
| 14S-76 | | | | | | |
| 14S-77 | 14S-6 | 6 | | 6 | None | A, B, C=Al; D, E, F=CH |
| 14S-78 | 14S-2 | 4 | | 4 | None | A, B=Al; C, D=CH |
| 14S-79 | 14S-5 | 5 | | 5 | None | n. 1=Al; n. 1=CH; Balance=Cu |
| 14S-80 | 14S-7 | 3 | | 3 | None | n. 2=Fe; n. 1=Co |
| 16-50 | | | | | | |
| 16-51 | | | | | | |
| 16-53 | 16-9 | 4 | 2 | 2 | 70° | A=Al; C=CH; B, D=Cu |
| 16-55 | 16-10 | 3 | 3 | | 45° | A=Al; C=CH; B, D=Cu |
| 16-56 | 16-13 | 2 | 2 | | 90° | A=Co; B=Cu |
| 16-57 | 16-10 | 3 | 3 | | None | A=Al; B=Cu; C=CH |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 16-58 | 16-10 | 3 | 3 | | None | A=Co; B-C=Cu |
| 16-60 | 16-13 | 2 | 2 | | None | A=Al; B=CH |
| 16-61 | | | | | | |
| 16S-50 | 16S-8 | 5 | | 5 | None | n. 1=Co; n. 1=Fe; n. 3=Cu (crimp type) |
| 16S-51 | 16S-1 | 7 | | 7 | None | A, F=Al; B=CH; Balance=Cu |
| 16S-52 | 16S-4 | 2 | | 2 | None | A=CH; B=Al |
| 16S-53 | 16S-5 | 3 | | 3 | None | A, B, C=Fe |
| 16S-54 | 16S-1 | 7 | | 7 | None | A=Al; B=CH; Balance=Cu |
| 16S-55 | 16S-4 | 2 | | 2 | None | n. 1=Co; n. 1=Cu |
| 16S-56 | 16S-1 | 7 | | 7 | None | A-D=Fe; B-E=CO; Balance=Cu |
| 16S-57 | 16S-5 | 3 | | 3 | None | n. 1=CH; n. 1=Al; 1=Cu |
| 16S-58 | 16S-8 | 5 | | 5 | None | 2=Fe; 2=Co; 1=Cu |
| 16S-59 | 16S-1 | 7 | | 7 | None | 3=Al; 3=CH; 1=Cu |
| 16S-60 | | | | | | |
| 18-40 | | | | | | |
| 18-41 | 18-4 | 4 | | 4 | None | A, C=Fe; B, D=Co |
| 18-42 | 18-4 | 4 | | 4 | None | A, C=Al; B, D=Cr |
| 18-43 | 18-4 | 4 | | 4 | None | A, C=CH; B, D=Co |
| 18-44 | 18-22 | 3 | | 3 | None | n. 1=Al; n. 1=CH; n.1=Cu |
| 18-45 | 18-20 | 5 | | 5 | None | A=Fe; B=Co; Balance=Cu |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 18-46 | 18-4 | 4 | | 4 | None | n. 1=CH; n. 1=Al; 2=Cu |
| 18-47 | 18-4 | 4 | | 4 | None | A, C=CH; B, D=Al |
| 18-49 | 18-1 | 10 | | 10 | None | n. 3=Fe; n. 3=Co; Balance=Cu |
| 18-50 | 18-3 | 2 | 2 | | None | n. 1=Al; n. 1=CH |
| 18-51 | 18-12 | 6 | | 6 | None | A-B=Fe; E-D=Co; C-F=Cu |
| 18-52 | 18-11 | 5 | 5 | | None | A=Fe; B=Co; C=CH; D=Al; E=Cu |
| 18-53 | 18-12 | 6 | | 6 | None | A, D=Fe; B, E=Co; C, F=Cu |
| 18-54 | 18-15 | 4 | 4 | | None | A, C=Al; B, D=CH |
| 18-56 | 18-1 | 10 | | 10 | 45° | A, C, E, G, I=Fe; B, D, F, H, J=Co |
| 18-57 | 18-12 | 6 | | 6 | 45° | A, C, E=Al; B, D, F=CH |
| 18-59 | 18-12 | 6 | | 6 | 45° | A, C=Fe; B, E, F=Co; D=Cu |
| 18-60 | 18-11 | 5 | 5 | | 45° | A, D=Al; B, C=CH; E=Cu |
| 18-61 | 18-12 | 6 | | 6 | None | A, C=Fe; B, D=Co; E=CH; F=Al |
| 18-62 | 18-12 | 6 | | 6 | None | A, B, C=Fe; D, E, F=Co |
| 18-63 | 18-15 | 4 | 4 | | None | A, C=Co; B, D=Cu |
| 18-65 | 18-12 | 6 | | 6 | None | A=Fe; B=Co; Balance=Cu |
| 18-66 | 18-1 | 10 | | 10 | None | A, C, E, G, I=Cu; B, D, F, H, J=Co |
| 18-67 | 18-12 | 6 | | 6 | None | A, C, E=Cu; B, D, F=Co |
| 18-68 | 18-11 | 5 | 5 | | None | A, D=Al; B, C=CH; E=Cu |
| 18-69 | 18-1 | 10 | | 10 | None | A=Al; B=CH; Balance=Cu |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 18-70 | 18-11 | 5 | 5 | | None | A=Fe; B=Co; C=CH; D-Al; E=Cu |
| 18-71 | 18-12 | 6 | | 6 | None | n. 2=Al; n. 2=CH; n. 2=Cu |
| 18-72 | 18-10 | 4 | 4 | | 45° | n. 2=Fe; 2=Co |
| 18-73 | 18-10 | 4 | 4 | | None | n. 2=Fe; n. 2=Co |
| 18-74 | 18-10 | 4 | 4 | | None | n. 2=Co; n. 2=Cu |
| 18-75 | 18-1 | 10 | | 10 | None | n. 2=Al; n. 2=CH; Balance=Cu (crimp type) |
| 20-50 | 20-29 | 17 | | 17 | None | n. 7=Al; n.7=CH; n. 3=Cu |
| 20-51 | 20-7 | 8 | | 8 | None | A, C, E, G=CH; B, D, F, H=Al |
| 20-52 | 20-4 | 4 | 4 | | 315° | A=Fe; B=Co; C=CH; D=Al |
| 20-56 | 20-7 | 8 | | 8 | 45° | A, B, G, H=Fe; C, D, E, F=Co |
| 20-60 | 20-7 | 8 | | 8 | 45° | D=CH; E=Al; Balance=Cu |
| 20-61 | 20-29 | 17 | | 17 | 45° | A, B, M=Cu; Balance=Co |
| 20-62 | 20-15 | 7 | 7 | | 80° | A, C, E=Al; B, D, F=CH; G=Cu |
| 20-64 | 20-27 | 14 | | 14 | None | A=Al; C=CH; Balance=Cu |
| 20-641 | 20-27 | 14 | | 14 | None | A, B, C, D, E, F, G=Al; H, I, J, K, L, M, N=CH |
| 20-65 | 20-27 | 14 | | 14 | None | A, B, C, D, E, F, G=Fe; H, I, J, K, L, M, N=Co |
| 20-67 | 20-16 | 9 | 2 | 7 | None | H=Al; I=CH; Balance=Cu |
| 20-68 | 20-7 | 8 | | 8 | None | A, B, G, H=Co; C, D, E, F=Cu |
| 20-69 | 20-27 | 14 | | 14 | None | A, B, C, D, E, F, G=Cu; H, I, J, K, L, M, N=Co |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 20-70 | 20-29 | 17 | | 17 | None | A, C, E, G, J, L, N, R, T=Fe; B, D, F, H, K, M, P, S=Co |
| 20-71 | 20-29 | 17 | | 17 | None | S=Al; R=CH; Balance=Cu |
| 20-74 | 20-29 | 17 | | 17 | None | A, C, E, G, J, L, N, R=Fe; B, D, F, H, K, M, P, S=Co; T=Cu |
| 20-75 | 20-27 | 14 | | 14 | None | A, L, E=Al; B, F, M=CH; Balance=Cu |
| 20-76 | 20-29 | 17 | | 17 | None | n. 8=CH; 8=Al; n. 1=Cu |
| 20-77 | 20A-9 | 9 | | 9 | None | n. 3=Al; n.3=CH; n. 3=Ph Bz ∅ |
| 20-78 | 20-4 | 4 | 4 | | None | A=Fe; B=Co; Balance=Cu |
| 20-80 | 20-3 | 3 | 3 | | None | A=Al; C=CH; B=Cu |
| 20-81 | 20-21 | 9 | 1 | 8 | None | n. 4=Al; n. 4=CH; n. 1 size 12=Cu |
| 20-82 | 20-27 | 14 | | 14 | None | n. 4=Al; n. 10=Cu |
| 20-83 | 20-27 | 14 | | 14 | None | A, B=Cr; C, D=Al; Balance=Cu |
| 20-84 | 20-22 | 6 | 3 size 8 | 3 | None | B=Al; D=CH; Balance=Cu |
| 20-85 | 20-27 | 14 | | 14 | None | n. 12=CH; n. 1=Al; n. 1=Cu (All Crimp Type) |
| 20-86 | 20-27 | 14 | | 14 | None | n. 2=Al; n. 12=CH |
| 20-222 | 20-22 | 6 | 3 size 8 | 3 | None | B=Fe; D=Co; Balance=Cu |
| 22-57 | 22-14 | 19 | | 19 | 45° | A, C, E, G, J, L, N, R=Fe; B, D, F, H, K, M, P, S=Co; T, U, V=Cu |
| 22-60 | 22-14 | 19 | | 19 | 45° | U=Al; N=CH; Balance=Cu |
| 22-62 | 22-23 | 8 | 8 | | 300° | A, B, F, G=Al; C, D, E, H=CH |
| 22-68 | 22-19 | 14 | | 14 | 45° | A, C, E, G, J, L, M=Fe; B, D, F, H, K, P, N=Co |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*
*∆ Ph Bz = Phosphor Bronze*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 22-69 | 22-19 | 14 | | 14 | 45° | A, C, E, G, J, L, M=Cu; B, D, F, H, K, P, N=Co |
| 22-71 | 22-14 | 19 | | 19 | None | V=Al; U=CH; Balance=Cu |
| 22-72 | 22-5 | 6 | 2 | 4 | None | B=Al; E=CH; Balance=Cu |
| 22-73 | 22-5 | 6 | 2 | 4 | None | E=Al; B=CH; Balance=Cu |
| 22-74 | 22-23 | 8 | 8 | | None | A, C, E, G=Fe; B, D, F, H=Co |
| 22-75 | 22-23 | 8 | 8 | | None | A=Al; B, D, G, H=Cu; C=CH; E=Fe; F=Co |
| 22-77 | 22-19 | 14 | | 14 | None | B, D, F, H, J, K, M, P=Cu;<br>A, E, L=Fe; C, G, N=Co |
| 22-78 | 22-14 | 19 | | 19 | None | A, C, E, G, H, K, M, P, R, T=Co; Balance=Cu |
| 22-79 | 22-10 | 4 | | 4 | None | A, C=Co; B, D=Cu |
| 22-81 | 22-34 | 5 | 3 | 2 | None | E=Fe; D=Co; Balance=Cu |
| 22-82 | 22-14 | 19 | | 19 | None | A, L, C, E, G, J=Fe; B, M, D, F, H, K=Co;<br>N, U, P, R, S, T=Cu; V=Closed |
| 22-83 | 22-14 | 19 | | 19 | None | A, L, C, E, G, J=Al; B, M, D, F, H, K=CH;<br>N, U, P, R, S, T=Cu; V=Closed |
| 22-84 | | | | | | |
| 22-85 | 22-5 | 6 | 2 | 4 | None | n. 2=Al; n. 2=CH; Balance=Cu; |
| 22-86 | | | | | | |
| 24-56 | 24-20 | 11 | 2 | 9 | 45° | E=Al; F=CH; Balance=Cu |
| 24-57 | 24-28 | 24 | | 24 | 45° | A, C, J, V, Y, W, K, E, H, U, S, M=CH; Balance=Al |
| 24-62 | 24-48 | 24 | | 24 | None | A, C, E, G=Fe, B, D, F, H=Co; R, T=CH; S, U=Al;<br>Balance=Cu |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 24-63 | 24-28 | 24 | | 24 | None | A, C, E, G, J, L, K, N, S, U, W, Y=Cu<br>B, D, F, H, Q, R, M, P, T, V, X, Z=Co |
| 24-64 | 24-5 | 16 | | 16 | None | A, B, C, D, E, F, G, H=Fe;<br>J, K, L, M, N, P, R, S=Co |
| 24-68 | 24-28 | 24 | | 24 | None | D=Co; Balance=Cu |
| 24-69 | 24-19 | 12 | | 12 | None | n. 5=Co; n. 7=Cu |
| 24-70 | 24-28 | 24 | | 24 | None | n. 8=CH; n. 8=Al; n. 8=Ph Bz ∅ |
| 24-412 | 24-19 | 12 | | 12 | None | n. 6=Cu; n. 6=Co |
| 24-621 | 24-28 | 24 | | 24 | None | A, C, E, G, J, L, K, N, S, U, W, Y=Fe<br>B, D, F, H, Q, R, M, P, T, V, X, Z=Co |
| 24-622 | 24-28 | 24 | | 24 | None | A, C, E, G, J, L, K, N, S, U, W, Y=CH<br>B, D, F, H, Q, R, M, P, T, V, X, Z=Al |
| 24-71 | 24-5 | 16 | | 16 | None | A, B, C, D, E, F, G, H=Al;<br>J, K, L, M, N, P, R, S=CH |
| 28-53 | 28-11 | 22 | 4 | 18 | 45° | J, L=Al; K, M=CH; Balance=Cu |
| 28-58 | 28-20 | 14 | 10 | 4 | 45° | A, C, E, G, K, M=Al; B, D, F, H, L, N=CH; J, P=Cu |
| 28-61 | 28-21 | 37 | | 37 | 45° | A, C, J, Z, m, r, n, a, K, F, H, X, k, h, T, M, N, d=Fe;<br>Balance=Cu |
| 28-63 | 28-20 | 14 | 10 | 4 | 315° | A, C, E, G, J=Al;<br>B, D, F, H, P=Cr; Balance=Cu |
| 28-64 | 28-15 | 35 | | 35 | None | A, d=Al; B, j=CH; C, D, E, F, G, N, P, R, S, H, J, K, L, N,<br>W, X, Y, Z=Co; Balance=Cu |
| 28-65 | 28-12 | 26 | | 26 | None | A, C, E, G, J, L, N, R, T, V=Fe;<br>X, Z=Al; B, D, F, H, K, M, P, S, U,<br>W=Co; Y, a=CH; b, d=Cu |
| 28-66 | 28-16 | 20 | | 20 | None | n. 10=Co; n. 10=Cu |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*
*∆ Ph Bz = Phosphor Bronze*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 28-67 | 28-16 | 20 | | 20 | None | U=Co; Balance=Cu |
| 28-68 | 28-15 | 35 | | 35 | 45° | T=Al; U=CH; Balance=Cu |
| 28-69 | 28-11 | 22 | 4 | 18 | None | G=Al; R=CH; Balance=Cu |
| 28-70 | 28-11 | 22 | 4 | 18 | None | A=Al; B=CH; Balance=Cu |
| 28-77 | 28-16 | 20 | | 20 | None | n. 6=Fe; n. 6=Co; Balance=Cu |
| 28-78 | 28-15 | 35 | | 35 | None | A, B=CH; C, D=Al; Balance=Cu |
| 28-80 | 28-16 | 20 | | 20 | None | n. 10=Fe; n. 10=Co |
| 28-81 | 28-15 | 35 | | 35 | None | n. 10=Al; n. 10=CH; Balance=Cu |
| 28-82 | 28-15 | 35 | | 35 | None | n. 12=Fe; n. 12=Co; Balance=Cu |
| 28-83 | | | | | | |
| 28-201 | 28-20 | 14 | 10 | 4 | None | A, C, E, G, J, P=Co; Balance=Cu |
| 28-811 | 28-15 | 35 | | 35 | None | n. 17=CH; n. 17=Al; n. 1=Closed |
| 32-50 | 32-8 | 30 | 6 | 24 | None | M=CH; N=Al; Balance=Cu |
| 32-51 | 32-8 | 30 | 6 | 24 | 90° | M=CH; N=Al; Balance=Cu |
| 32-55 | 32-8 | 30 | 6 | 24 | 125° | M, N=CH; O, P=Al; Balance=Cu |
| 32-56 | | | | | | |
| 32A-401 | 32A-40 | 40 | | 40 | None | n. 13=Al; n. 13=CH; n. 14=Cu |
| 36-101 | 36-10 | 48 | | 48 | None | n. 24=Al; n. 24-CH |

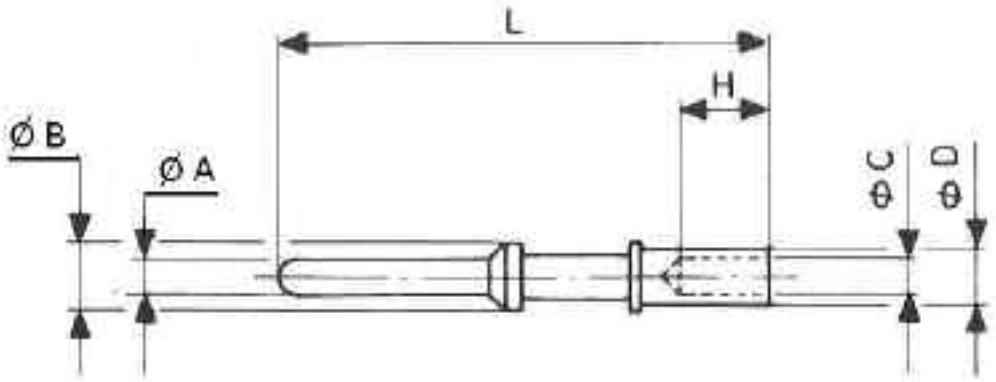
**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*

# Thermocouple Material

| **Abbreviation** | Fe | Co | Cu | CH | Al |
|---|---|---|---|---|---|
| **Material** | Iron | Constantan | Copper | Chromel | Alumel |
| **Identification Colors** | Black | Yellow | — | White | Green |

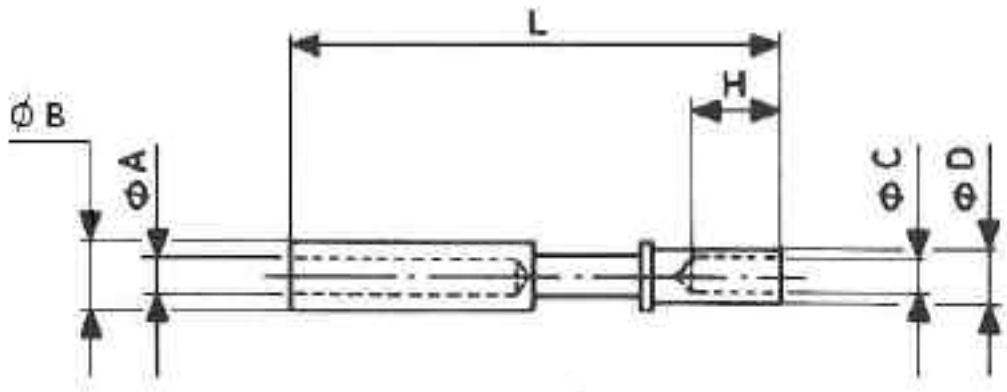
| Type | Similar to Type | Total Contacts | Contact Type | | Pin Insert Rotation | Total Quantity - Type of Contact and Location* |
|---|---|---|---|---|---|---|
| | | | 12 | 16 | | |
| 36-102 | 36-10 | 48 | | 48 | None | n. 24=CH; n. 24=Co |
| 36-53 | 36-7 | 47 | 7 | 40 | 45° | U, V, W=Al; XYZ=CH; Balance=Cu |
| 36-56 | 36-10 | 48 | | 48 | None | A, C, E, G, L, J, H, P, R, T, V, X, Z, b, d, f, g, k, q, n, m, u, w, y=Co; Balance=Cu |
| 36-57 | 36-8 | 47 | 1 | 46 | None | W=Al; F=CH; Balance=Cu |
| 36-58 | 36-15 | 35 | | 35 | None | H=Al; G=CH; Balance=Cu |
| 36-61 | 36-15 | 35 | | 35 | None | A, C, E, J, K, L, M, N, P, R, T, V, f, X, Y, h, j, c=Co; Balance=Cu |
| 36-62 | 36-10 | 48 | | 48 | None | A, C, E=Al; B, D, F=CH; Balance=Cu |
| 36-63 | 36-10 | 48 | | 48 | None | n. 16=Al; n. 16=CH; n. 16=Cu |
| 36-64 | 36-10 | 48 | | 48 | None | n. 24=Fe; n. 24=Co |
| 36-65 | | | | | | |
| 40-58 | 40A-31 | 31 | 31 | | None | n. 15=Al; n. 16=CH |
| 40-59 | | | | | | |
| 40-77 | | | | | | |
| 40-78 | | | | | | |

**We suggest these contact positions. Contacts are normally supplied loose, or they can be installed if requested, in any position.*




| VEAM Part Number | Contact Size | | Wire Section | | ØA | ØB | ØC | ØD | H | L |
|---|---|---|---|---|---|---|---|---|---|---|
| | CR Metr. | CR1 AWG | mm² | AWG | | | | | | |
| 45450 | 10 | — | 0,75 / 1 | — | 1,04 | 2 | 1,5 | 2,4 | 4,6 | 28,4 |
| 45451 | 15S* | 16S* | 1 / 1,5 | 16 | 1,6 | 3,2 | 1,75 | 2,75 | 6,8 | 27,4 |
| 45453 | 15* | 16* | 1 / 1,5 | 16 | 1,6 | 3,2 | 1,75 | 2,75 | 6,8 | 31,4 |
| 45454 | 25* | 12* | 2,5 | 12 | 2,4 | 4,8 | 2,5 | 3,8 | 6,8 | 37 |
| 45455-38 | 60 | — | 6 | — | 3,6 | 7,6 | 3,5 | 6,8 | 12 | 39,6 |
| 45455-10 | 100 | — | 10 | — | 3,6 | 7,6 | 4,8 | 6,8 | 12 | 39,6 |
| 45455/AWG | — | 8 | — | 8 | 3,6 | 7,6 | 4,55 | 6,8 | 12 | 39,6 |
| 45456 | 160 | — | 16 | — | 5,75 | 11,2 | 6,2 | 9,55 | 12 | 39,6 |
| 45456/AWG | — | 4 | — | 4 | 5,75 | 11,2 | 7,1 | 9,55 | 12 | 39,6 |
| 45457 | 500 | — | 50 | — | 9,1 | 15,15 | 10,7 | 14,35 | 14 | 41 |
| 45457/AWG | — | 0 | — | 0 | 9,1 | 15,15 | 11,5 | 14,35 | 14 | 41 |

*Note: please consult the "CIR Series Assembly Guide" for assembly instructions and accessories.*
** 16S-16 and 12 sizes contacts are unified to 15S-15-25 sizes.*




| VEAM Part Number | Contact Size | | Wire Section | | ØA | ØB | ØC | ØD | H | L |
|---|---|---|---|---|---|---|---|---|---|---|
| | CR Metr. | CR1 AWG | mm² | AWG | | | | | | |
| 45470 | 10 | — | 0,75 / 1 | — | 1,07 | 2,6 | 1,5 | 2,4 | 4,6 | 36,8 |
| 45471 | 15S* | 16S* | 1 / 1,5 | 16 | 1,65 | 3,2 | 1,75 | 2,75 | 6,8 | 29,1 |
| 45473 | 15* | 16* | 1 / 1,5 | 16 | 1,65 | 3,2 | 1,75 | 2,75 | 6,8 | 37,8 |
| 45474 | 25* | 12* | 2,5 | 12 | 2,45 | 4,8 | 2,5 | 3,8 | 6,8 | 37 |
| 45475-38 | 60 | — | 6 | — | 3,65 | 7,6 | 3,5 | 6,8 | 12 | 40,1 |
| 45475-10 | 100 | — | 10 | — | 3,65 | 7,6 | 4,8 | 6,8 | 12 | 40,1 |
| 45475/AWG | — | 8 | — | 8 | 3,65 | 7,6 | 4,55 | 6,8 | 12 | 40,1 |
| 45476 | 160 | — | 16 | — | 5,8 | 11,2 | 6,2 | 9,55 | 12 | 40,1 |
| 45476/AWG | — | 4 | — | 4 | 5,8 | 11,2 | 7,1 | 9,55 | 12 | 40,1 |
| 45477 | 500 | — | 50 | — | 9,15 | 15,15 | 10,7 | 14,35 | 14 | 41,6 |
| 45477/AWG | — | 0 | — | 0 | 9,15 | 15,15 | 11,5 | 14,35 | 14 | 41,6 |

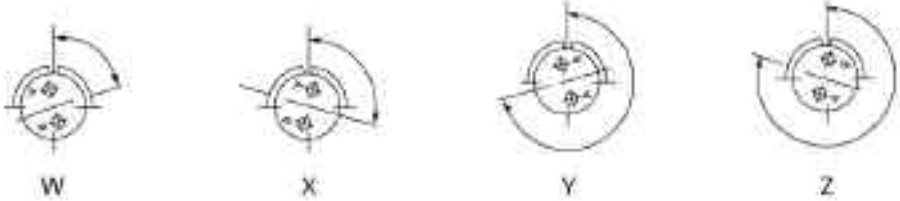
*Note: please consult the "CIR Series Assembly Guide" for assembly instructions and accessories.*
** 16S-16 and 12 sizes contacts are unified to 15S-15-25 sizes.*

| Contact Arrangements | Number of Contacts | CR DIN Type | CR1 AWG Type | Service Rating |
|---|---|---|---|---|
| 10SL-3 | 3 | 15S | 16S | A |
| 10SL-4 | 2 | 15S | 16S | A |
| 14S-2 | 4 | 15S | 16S | I |
| 14S-5 | 5 | 15S | 16S | I |
| 14S-6 | 6 | 15S | 16S | I |
| 14S-7 | 3 | 15S | 16S | A |
| 16S-1 | 7 | 15S | 16S | A |
| 16S-4 | 2 | 15S | 16S | D |
| 16S-18 | 7 (16S-1 Rotated by 100°) | 15S | 16S | A |
| 16-10 | 3 | 25 | 12 | A |
| 16-11 | 2 | 25 | 12 | A |
| 16-12 | 1 | 160 | 4 | A |
| 18-1 | 10 | 15 | 16 | A: (B, C, F, G) I: (all other) |
| 18-11 | 5 | 25 | 12 | A |
| 20-2 | 1 | 500 | 0 | D |
| 20-8 | 4<br>2 | 15<br>100 | 16<br>8 | I |
| 20-15 | 7 | 25 | 12 | A |
| 20-27 | 14 | 15 | 16 | A |
| 20-29 | 17 | 15 | 16 | A |
| 20-33 | 11 | 15 | 16 | A |
| 20A-8 | 6<br>2 | 15<br>100 | 16<br>8 | I |
| 20A-9 | 9 | 25 | 12 | D: (J)<br>I: (all other) |
| 20A-48 | 19 | 15 | 16 | I |
| 22-2 | 3 | 60 | 8 | D |
| 22-7 | 1 | 500 | 0 | E |
| 22-12 | 3<br>2 | 15<br>100 | 16<br>8 | D |
| 22-14 | 19 | 15 | 16 | A |
| 22-19 | 14 | 15 | 16 | A |
| 22-22 | 4 | 100 | 8 | A |
| 22B-22 | 4 | 60 | 8 | A |
| 22-23 | 8 | 25 | 12 | D: (H)<br>A: (all other) |
| 22D-23 | 7-12<br>1-spec | 25 | 12 | A |
| 22-27 | 8<br>1 | 15<br>60 | 16<br>8 | D: (J)<br>A: (all other) |

| Contact Arrangements | Number of Contacts | CR DIN Type | CR1 AWG Type | Service Rating |
|---|---|---|---|---|
| 24-10 | 7 | 100 | 8 | A |
| 24-11 | 6<br>3 | 25<br>100 | 12<br>8 | A |
| 24-12 | 3<br>2 | 25<br>160 | 12<br>4 | A |
| 24-28 | 24 | 15 | 16 | I |
| 28-11 | 18<br>4 | 15<br>25 | 16<br>12 | A |
| 28-21 | 37 | 15 | 16 | A |
| 28-22 | 3<br>3 | 160<br>15 | 4<br>16 | D |
| 28A-63 | 19<br>9 | 15<br>25 | 16<br>12 | A: (e)<br>I: (all other) |
| 32-1 | 3<br>2 | 25<br>500 | 12<br>0 | E: (A)<br>D: (all other) |
| 32-5 | 2 | 500 | 0 | D |
| 32-6 | 16<br>2<br>3<br>2 | 15<br>25<br>60<br>160 | 16<br>12<br>8<br>4 | A |
| 32-7 | 28<br>7 | 15<br>25 | 16<br>12 | I: (A, B, h, j)<br>A: (all other) |
| 32A-69 | 41<br>20 | 10<br>15 | 20<br>16 | I |
| 36-3 | 3<br>3 | 500<br>25 | 0<br>12 | D |
| 36-5 | 4 | 500 | 0 | A |
| 36-10 | 48 | 15 | 16 | A |

Specifications and dimensions subject to change
Dimensions shown in mm.

## *Insert Rotations - Alternate Positions CR-CR1*




Alternate Positions of Insert Arrangements (Key Stationary - Insert Rotated)

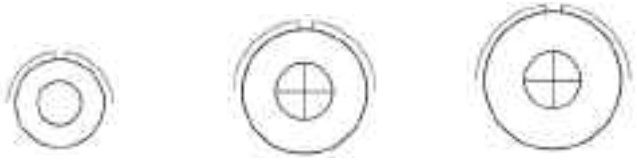
Front View of Pin Insert

| Insert Type | Degrees for Alternate Positions | | | |
|---|---|---|---|---|
| | W | X | Y | Z |
| 14S-2 | — | 120 | 240 | — |
| 14S-5 | — | 110 | — | — |
| 14S-6 | 90 | — | — | — |
| 14S-7 | 90 | 180 | 270 | — |
| 16S-1 | 80 | — | — | 280 |
| 16S-4 | 35 | 110 | 250 | 325 |
| 16-10 | 90 | 180 | 270 | — |
| 16-11 | 35 | 110 | 250 | 325 |
| 18-1 | 70 | 145 | 215 | 290 |
| 18-11 | — | 170 | 265 | — |
| 20-8 | 80 | 110 | 250 | 280 |
| 20-15 | 80 | — | — | 280 |
| 20-27 | 35 | 110 | 250 | 325 |
| 20-29 | 80 | — | — | 280 |
| 20-33 | — | — | — | 280 |
| 20A-9 | — | 110 | 250 | — |
| 20A-48 | — | 80 | 280 | — |
| 22-2 | 70 | 145 | 215 | 290 |
| 22-12 | 80 | 110 | 250 | 280 |
| 22-14 | 80 | — | — | 280 |
| 22-19 | 80 | 110 | 250 | 280 |
| 22-22 | — | 110 | 250 | — |
| 22B-22 | — | 110 | 250 | — |
| 22-23 | 35 | — | 250 | — |
| 22D-23 | 35 | — | 250 | — |
| 22-27 | 80 | — | 250 | 280 |

| Insert Type | Degrees for Alternate Positions | | | |
|---|---|---|---|---|
| | W | X | Y | Z |
| 24-10 | 80 | — | — | 280 |
| 24-11 | 35 | 110 | 250 | 325 |
| 24-12 | 80 | 110 | 250 | 280 |
| 24-28 | 80 | 110 | 250 | 280 |
| 28-11 | 80 | 110 | 250 | 280 |
| 28-20 | 80 | 110 | 250 | 280 |
| 28-21 | 80 | 110 | 250 | 280 |
| 28-22 | 70 | 145 | 215 | 290 |
| 28A-63 | — | 100 | 260 | — |
| 32-1 | 80 | 110 | 250 | 280 |
| 32-5 | 80 | 110 | 250 | 325 |
| 32-6 | 80 | 110 | 250 | 280 |
| 32-7 | 80 | 125 | 235 | 280 |
| 32A-69 | — | 110 | 250 | — |
| 36-3 | 70 | 145 | 215 | 290 |
| 36-5 | — | 120 | 240 | — |
| 36-10 | 80 | 125 | 235 | 280 |

Contact Legend

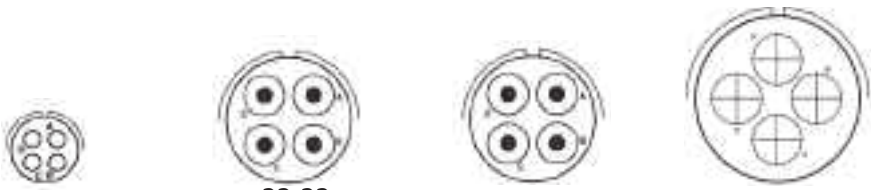
| 20 | 18 | 16 | 12 | 8 | 4 | 0 | 4/0 |
|---|---|---|---|---|---|---|---|



| Insert Arrangements | **16-12** | **20-2** | **22-7** |
|---|---|---|---|
| Number of Contacts | 1 | 1 | 1 |
| Contact Size DIN | 160 | 500 | 500 |
| Contact Size AWG | 4 | 0 | 0 |
| Service Rating | A | D | E |

| Insert Arrangements | **10SL-4** | **16S-4** | **16-11** | **32-5** |
|---|---|---|---|---|
| Number of Contacts | 2 | 2 | 2 | 2 |
| Contact Size DIN | 15S | 15S | 25 | 500 |
| Contact Size AWG | 16S | 16S | 12 | 0 |
| Service Rating | A | D | A | D |

| Insert Arrangements | **10SL-3** | **14S-7** | **16-10** | **22-2** |
|---|---|---|---|---|
| Number of Contacts | 3 | 3 | 3 | 3 |
| Contact Size DIN | 15S | 15S | 25 | 60 |
| Contact Size AWG | 16S | 16S | 12 | 8 |
| Service Rating | A | A | A | D |

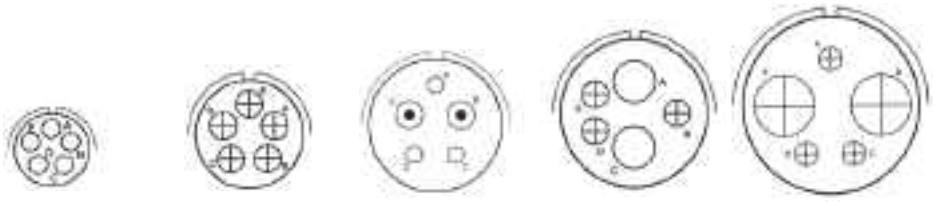


| Insert Arrangements | **14S-2** | **22-22** | **22B-22** | **36-5** |
|---|---|---|---|---|
| Number of Contacts | 4 | 4 | 4 | 4 |
| Contact Size DIN | 15S | 100 | 60 | 500 |
| Contact Size AWG | 16S | 8 (10 mm²) | 8 (6 mm²) | 0 |
| Service Rating | 1 | A | A | A |

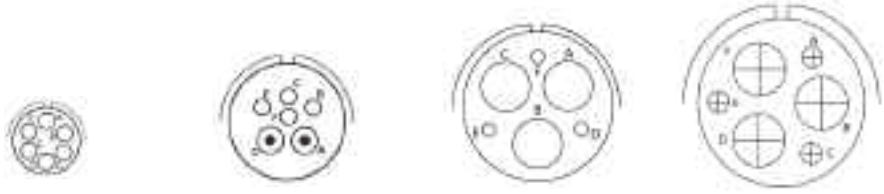
Specifications and dimensions subject to change
Dimensions shown in mm.

Contact Legend

20 18 16 12 8 4 0 4/0



| | | | | | |
|---|---|---|---|---|---|
| Insert Arrangements | 14S-5 | 18-11 | 22-12 | 24-12 | 32-1 |
| Number of Contacts | 5 | 5 | 5 | 5 | 5 |
| Contact Size | DIN 15S | 25 | 2-100; 3-15 | 2-160; 3-25 | 2-500; 3-25 |
| | AWG 16S | 12 | 2-8; 3-16 | 2-4; 3-12 | 2-0; 3-12 |
| Service Rating | I | A | D | A | A=E; B, C, D, E=D |

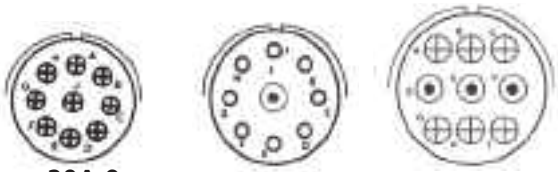


| | | | | |
|---|---|---|---|---|
| Insert Arrangements | 14S-6 | 20-8 | 28-22 | 36-3 |
| Number of Contacts | 6 | 6 | 6 | 6 |
| Contact Size | DIN 15S | 2-100; 4-15 | 3-160; 3-15 | 3-500; 3-25 |
| | AWG 16 | 2-8; 4-16 | 3-4; 3-16 | 3-0; 3-12 |
| Service Rating | I | I | D | D |

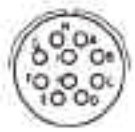
| | | | | |
|---|---|---|---|---|
| Insert Arrangements | 16S-1 | 16S-18<br>16S-1rotated by 100° | 20-15 | 24-10 |
| Number of Contacts | 7 | 7 | 7 | 7 |
| Contact Size | DIN 15S | 15S | 25 | 100 |
| | AWG 16S | 16S | 12 | 8 (10 mm²) |
| Service Rating | A | A | A | A |

| | | | |
|---|---|---|---|
| Insert Arrangements | 20A-8 | 22D-23 | 22-23 |
| Number of Contacts | 8 | 8 | 8 |
| Contact Size | DIN 6-15; 2-100 | 7-25; 1 spec. | 25 |
| | AWG 6-16; 2-8 | 7-12; 1 spec. | 12 |
| Service Rating | I | A (with rear protection) | H=D BALANCE=A |

Contact Legend

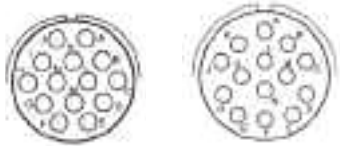


| | | | |
|---|---|---|---|
| Insert Arrangements | 20A-9 | 22-27 | 24-11 |
| Number of Contacts | 9 | 9 | 9 |
| Contact Size | DIN 25 | 1-60; 8-15; 1-8; | 3-100; 6-25 |
| | AWG 12 | 8-16 | 3-8; 6-12 |
| Service Rating | J=D; BALANCE=I | J=D BALANCE=I | A |



| | |
|---|---|
| Insert Arrangements | 18-1 |
| Number of Contacts | 10 |
| Contact Size | DIN 15 |
| | AWG 16 |
| Service Rating | B, C, F, G=A BALANCE=I |

| | |
|---|---|
| Insert Arrangements | 20-33 |
| Number of Contacts | 11 |
| Contact Size | DIN 15 |
| | AWG 16 |
| Service Rating | A |



| | | |
|---|---|---|
| Insert Arrangements | 20-27 | 22-19 |
| Number of Contacts | 14 | 14 |
| Contact Size | DIN 15 | 15 |
| | AWG 16 | 16 |
| Service Rating | A | A |

Specifications and dimensions subject to change
Dimensions shown in mm.

Contact Legend

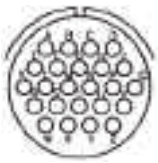
| 20 | 18 | 16 | 12 | 8 | 4 | 0 | 4/0 |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Insert Arrangements | 20-29 |
| Number of Contacts | 17 |
| Contact Size | DIN 15 |
| | AWG 16 |
| Service Rating | A |

| | | |
|---|---|---|
| Insert Arrangements | 20A-48 | 22-14 |
| Number of Contacts | 19 | 19 |
| Contact Size | DIN 15 | 15 |
| | AWG 16 | 16 |
| Service Rating | I | A |

| | |
|---|---|
| Insert Arrangements | 28-11 |
| Number of Contacts | 22 |
| Contact Size | DIN 4-25; 18-15 |
| | AWG 4-12; 18-16 |
| Service Rating | A |

| | |
|---|---|
| Insert Arrangements | 32-6 |
| Number of Contacts | 23 |
| Contact Size | DIN / AWG 2-160; 3-60; 2-25; 16-15 / 2-4; 3-8; 2-12; 16-16 |
| Service Rating | A |

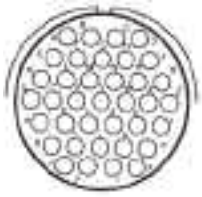


| | |
|---|---|
| Insert Arrangements | 24-28 |
| Number of Contacts | 24 |
| Contact Size | DIN 15 |
| | AWG 16 |
| Service Rating | I |

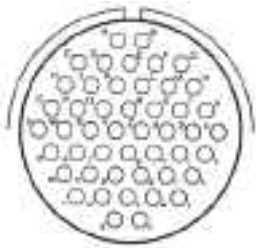
Contact Legend

| | | |
|---|---|---|
| Insert Arrangements | | 28A-63 |
| Number of Contacts | | 28 |
| Contact Size | DIN | 9-25; 19-15 |
| | AWG | 9-12; 19-16 |
| Service Rating | | e=A<br>BALANCE=I |

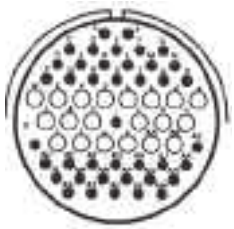
| | | |
|---|---|---|
| Insert Arrangements | | 32-7 |
| Number of Contacts | | 35 |
| Contact Size | DIN | 7-25; 28-15 |
| | AWG | 7-12; 28-16 |
| Service Rating | | A, B, h, J=I<br>BALANCE=A |



| | | |
|---|---|---|
| Insert Arrangements | | 28-21 |
| Number of Contacts | | 37 |
| Contact Size | DIN | 15 |
| | AWG | 16 |
| Service Rating | | A |



| | | |
|---|---|---|
| Insert Arrangements | | 36-10 |
| Number of Contacts | | 48 |
| Contact Size | DIN | 15 |
| | AWG | 16 |
| Service Rating | | A |



| | | |
|---|---|---|
| Insert Arrangements | | 32A-69 |
| Number of Contacts | | 61 |
| Contact Size | DIN | 20-15; 41-10 |
| | AWG | 30-16; 41-20 |
| Service Rating | | I |

Specifications and dimensions subject to change
Dimensions shown in mm.

# Seating dimensions CIR connectors: SOCKETS

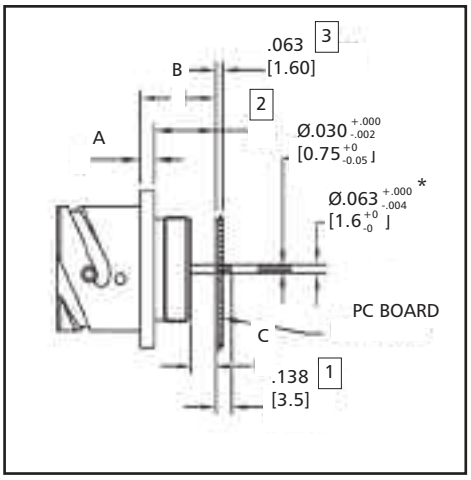
**Notes:**

1 FOR SIZES 10SL &16S YM - .142[3.6]
FOR YM4 VERSION - .078[2.0]
FOR YML VERSION - .201[5.11]

2 TO OBTAIN THE DIMENSION VALUE, SUBTRACT A FROM B.

3 CONSULT CUSTOMER SERVICE DEPARTMENT FOR PCB THICKNESS OTHER THAN SPECIFIED.

4 CONSULT CUSTOMER SERVICE DEPARTMENT FOR CONTACTS USED IN RECEPTACLES FOR STAND OFF MOUNTING.




* Or .079 Check with customer service

| SHELL SIZE | | CIR020 | | CONTACT | CLASS |
|---|---|---|---|---|---|
| | A | B | C | SOCKET | |
| | ±0.2 ± .008 | ±0.5 ± .020 | ±0.5 ± .020 | [note 4] | |
| | mm inch | mm inch | mm inch | | |
| 10 SL | 2.79 | 15.42 | 4.93 | 47187-16S | YM |
| | .110 | .607 | .194 | | |
| | TBD | TBD | TBD | TBD | YM4 |
| | | | | | |
| 14 S | 3.20 | 15.29 | 4.93 | 47187-16S | YM |
| | .126 | .602 | .194 | | |
| | TBD | TBD | TBD | TBD | YM4 |
| | | | | | |
| 16 S | 3.20 | 15.26 | 4.93 | 47187-16S | YM |
| | .126 | .601 | .194 | | |
| | TBD | TBD | TBD | TBD | YM4 |
| | | | | | |
| 16 | 3.20 | 20.09 | 5.28 | 47187-161 | YM |
| | .126 | .791 | .208 | | |
| | 3.20 | 21.61 | 6.80 | 47187-162 | YM1 |
| | .126 | .851 | .268 | | |
| 18 | 3.98 | 19.96 | 5.28 | 47187-161 | YM |
| | .157 | .786 | .208 | | |
| | 3.98 | 21.49 | 6.80 | 47187-162 | YM1 |
| | .157 | .846 | .268 | | |
| 20 | 3.98 | 19.96 | 5.28 | 47187-161 | YM |
| | .157 | .786 | .208 | | |
| | 3.98 | 21.49 | 6.80 | 47187-162 | YM1 |
| | .157 | .846 | .268 | | |
| 22 | 3.98 | 20.01 | 5.28 | 47187-161 | YM |
| | .157 | .788 | .208 | | |
| | 3.98 | 21.54 | 6.80 | 47187-162 | YM1 |
| | .157 | .848 | .268 | | |
| 24 | 3.98 | 20.01 | 3.38 | 47187-161 | YM2 |
| | .157 | .788 | .133 | | |
| | 3.98 | 21.54 | 4.90 | 47187-162 | YM |
| | .157 | .848 | .193 | | |
| 28 | 3.98 | 20.01 | 3.38 | 47187-161 | YM2 |
| | .157 | .788 | .133 | | |
| | 3.98 | 21.54 | 4.90 | 47187-162 | YM |
| | .157 | .848 | .193 | | |
| | 3.98 | 21.54 | 4.90 | 47187-162 | YML |
| | .157 | .848 | .193 | | |
| 32 | 3.98 | 16.89 | 1.78 | 47187-161 | YM3 |
| | .157 | .665 | .070 | | |
| | 3.98 | 18.41 | 3.30 | 47187-162 | YM2 |
| | .157 | .725 | .130 | | |
| 36 | 3.98 | 16.89 | 1.78 | 47187-161 | YM3 |
| | .157 | .665 | .070 | | |
| | 3.98 | 18.41 | 3.30 | 47187-162 | YM2 |
| | .157 | .725 | .130 | | |
| 40 | 3.98 | 16.89 | 1.78 | 47187-161 | YM3 |
| | .157 | .665 | .070 | | |
| | 3.98 | 18.41 | 3.30 | 47187-162 | YM2 |
| | .157 | .725 | .130 | | |

# Seating dimensions CIR connectors: SOCKETS

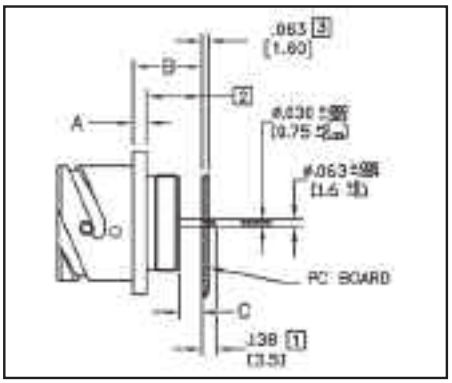
**Notes:**

1 For sizes 10SL &16S YM - .142[3.6]
For YM4 Version - .078[2.0]
For YML Version - .201[5.11]

2 To obtain the dimension value, subtract A from B.

3 Consult Customer Service Department for PCB thickness other than specified.

4 Consult Customer Service Department for contacts used in receptacles for stand off mounting.




* Or .079 Check with customer service

| SHELL SIZE | | CIR 030 | | | CIR 07 | | CONTACT | CLASS |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | A | B | C | SOCKET | |
| | ± 0.2 ± .008 | ±0.5 ± .020 | ±0.5 ± .020 | ± 0.2 ± .008 | ±0.5 ± .020 | ±0.5 ± .020 | [note 4] | |
| | mm / inch | mm / inch | mm / inch | mm / inch | mm / inch | mm / inch | | |
| 10 SL | 2.79 | 11.38 | 1.98 | N/A | N/A | N/A | 47187-16S | YM |
| | .110 | .448 | .078 | | | | | |
| | 2.79 | 16.55 | 7.15 | N/A | N/A | N/A | 47187L-16S | YM2 |
| | .110 | .652 | .281 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 14 S | 3.2 | 11.38 | 1.98 | N/A | N/A | N/A | 47187-16S | YM |
| | .126 | .448 | .078 | | | | | |
| | 3.2 | 16.55 | 7.15 | N/A | N/A | N/A | 47187L-16S | YM2 |
| | .126 | .652 | .281 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 16 S | 3.2 | 11.38 | 1.98 | N/A | N/A | N/A | 47187-16S | YM |
| | .126 | .448 | .078 | | | | | |
| | 3.2 | 16.5 | 7.15 | N/A | N/A | N/A | 47187L-16S | YM2 |
| | .126 | .652 | .281 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 16 | 3.2 | 15.98 | 5.2 | 4.8 | 6.9 | 2.11 | 47187-161 | YM |
| | .126 | .629 | .205 | .189 | .272 | .083 | | |
| | 3.2 | 17.55 | 6.8 | 4.8 | 8.51 | 3.71 | 47187-162 | YM1 |
| | .126 | .691 | .268 | .189 | .335 | .146 | | |
| 18 | 3.98 | 15.98 | 5.2 | 4.8 | 5.31 | 0.51 | 47187-161 | YM |
| | .157 | .629 | .205 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.8 | 4.8 | 6.86 | 2.06 | 47187-162 | YM1 |
| | .157 | .691 | .268 | .189 | .270 | .081 | | |
| 20 | 3.98 | 15.98 | 5.2 | 4.8 | 5.31 | 0.51 | 47187-161 | YM |
| | .157 | .629 | .205 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.8 | 4.8 | 6.86 | 2.06 | 47187-162 | YM1 |
| | .157 | .691 | .268 | .189 | .270 | .081 | | |
| 22 | 3.98 | 15.98 | 5.2 | 4.8 | 5.31 | 0.51 | 47187-161 | YM |
| | .157 | .629 | .205 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.8 | 4.8 | 6.86 | 2.06 | 47187-162 | YM1 |
| | .157 | .691 | .268 | .189 | .270 | .081 | | |
| 24 | 3.98 | 15.98 | 5.2 | 4.8 | 5.31 | 0.51 | 47187-161 | YM2 |
| | .157 | .629 | .205 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.8 | 4.8 | 6.86 | 2.06 | 47187-162 | YM |
| | .157 | .691 | .268 | .189 | .270 | .081 | | |
| 28 | 3.98 | 14.96 | 3.30 | N/A | N/A | N/A | 47187-161 | YM2 |
| | .157 | .589 | .130 | | | | | |
| | 3.98 | 16.56 | 4.9 | N/A | N/A | N/A | 47187-162 | YM |
| | .157 | .652 | .193 | | | | | |
| | 3.98 | 16.56 | 4.9 | N/A | N/A | N/A | 47187L-162 | YML |
| | .157 | .652 | .193 | | | | | |
| 32 | 3.98 | 14.96 | 1.70 | N/A | N/A | N/A | 47187-161 | YM3 |
| | .157 | .589 | .067 | | | | | |
| | 3.98 | 16.56 | 3.30 | N/A | N/A | N/A | 47187-162 | YM2 |
| | .157 | .652 | .130 | | | | | |
| 36 | 3.98 | 14.96 | 1.70 | N/A | N/A | N/A | 47187-161 | YM3 |
| | .157 | .589 | .067 | | | | | |
| | 3.98 | 16.56 | 3.30 | N/A | N/A | N/A | 47187-162 | YM2 |
| | .157 | .652 | .130 | | | | | |
| 40 | 3.98 | 14.96 | 1.70 | N/A | N/A | N/A | 47187-161 | YM3 |
| | .157 | .589 | .067 | | | | | |
| | 3.98 | 16.56 | 3.30 | N/A | N/A | N/A | 47187-162 | YM2 |
| | .157 | .652 | .130 | | | | | |

Specifications and dimensions subject to change
Dimensions shown in mm.

# Seating dimensions CIR connectors: PINS

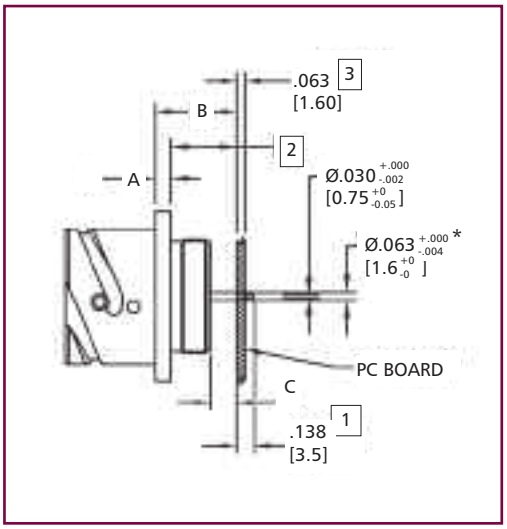
**Notes:**

1 For sizes 10SL &16S YM - .142[3.6]
For YM4 Version - .078[2.0]
For YML Version - .201[5.11]

2 To obtain the dimension value, subtract A from B.

3 Consult Customer Service Department for PCB thickness other than specified.

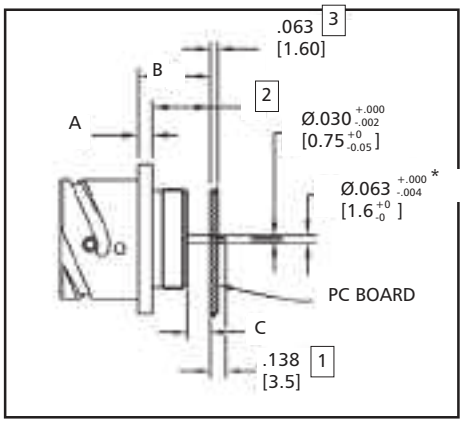
4 Consult Customer Service Department for contacts used in receptacles for stand off mounting.




* Or .079 Check with customer service

| SHELL SIZE | CIR 020 | | | | | | CONTACT | CLASS |
|---|---|---|---|---|---|---|---|---|
| | A | | B | | C | | PIN | |
| | ±0.2 | ± .00 | ±0.5 | ± .020 | ±0.5 | ± .020 | [note 4] | |
| | mm | inch | mm | inch | mm | inch | | |
| 10 SL | 2.79 | | 14.70 | | 4.22 | | 48784-16S | YM |
| | | .110 | | .579 | | .166 | | |
| | 2.79 | | 12.39 | | 1.90 | | 48776-16S | YM4 |
| | | .110 | | .488 | | .075 | | |
| 14S | 3.20 | | 14.53 | | 4.14 | | 48784-16S | YM |
| | | .126 | | .572 | | .163 | | |
| | 3.20 | | 12.24 | | 1.85 | | 48776-16S | YM4 |
| | | .126 | | .482 | | .073 | | |
| 16S | 3.20 | | 12.19 | | 1.80 | | 48784-16S | YM |
| | | .126 | | .480 | | .071 | | |
| | 3.20 | | 12.42 | | 2.03 | | 48776-16S | YM4 |
| | | .126 | | .489 | | .080 | | |
| 16 | 3.20 | | 20.00 | | 5.18 | | 46898-1 | YM |
| | | .126 | | .787 | | .204 | | |
| | 3.20 | | 21.59 | | 6.78 | | 46898-2 | YM1 |
| | | .126 | | .850 | | .267 | | |
| 18 | 3.98 | | 19.91 | | 5.20 | | 46898-1 | YM |
| | | .157 | | .784 | | .205 | | |
| | 3.98 | | 21.51 | | 5.22 | | 46898-2 | YM1 |
| | | .157 | | .847 | | .268 | | |
| 20 | 3.98 | | 19.89 | | 5.18 | | 46898-1 | YM |
| | | .157 | | .783 | | .204 | | |
| | 3.98 | | 21.49 | | 6.78 | | 46898-2 | YM1 |
| | | .157 | | .846 | | .267 | | |
| 22 | 3.98 | | 19.89 | | 5.18 | | 46898-1 | YM |
| | | .157 | | .783 | | .204 | | |
| | 3.98 | | 21.49 | | 6.78 | | 46898-2 | YM1 |
| | | .157 | | .846 | | .267 | | |
| 24 | 3.98 | | 18.41 | | 3.30 | | 46898-1 | YM2 |
| | | .157 | | .725 | | .130 | | |
| | 3.98 | | 20.00 | | 4.90 | | 46898-2 | YM |
| | | .157 | | .788 | | .193 | | |
| 28 | 3.98 | | 18.41 | | 3.30 | | 46898-1 | YM2 |
| | | .157 | | .725 | | .130 | | |
| | 3.98 | | 20.00 | | 4.90 | | 46898-2 | YM |
| | | .157 | | .788 | | .193 | | |
| 32 | 3.98 | | 16.81 | | 1.68 | | 46898-1 | YM3 |
| | | .157 | | .662 | | .066 | | |
| | 3.98 | | 18.41 | | 3.28 | | 46898-2 | YM2 |
| | | .157 | | .725 | | .129 | | |
| 36 | 3.98 | | 16.81 | | 1.66 | | 46898-1 | YM3 |
| | | .157 | | .662 | | .067 | | |
| | 3.98 | | 18.41 | | 3.30 | | 46898-2 | YM2 |
| | | .157 | | .725 | | .130 | | |
| 40 | 3.98 | | 16.81 | | 1.68 | | 46898-1 | YM3 |
| | | .157 | | .662 | | .066 | | |
| | 3.98 | | 18.41 | | 3.28 | | 46898-2 | YM2 |
| | | .157 | | .725 | | .129 | | |

## Seating dimensions CIR connectors: PINS




* Or .079 Check with customer service

**Notes:**

1 For sizes 10SL &16S YM - .142[3.6]
For YM4 Version - .078[2.0]
For YML Version - .201[5.11]

2 To obtain the dimension value, subtract A from B.

3 Consult Customer Service Department for PCB thickness other than specified.

4 Consult Customer Service Department for contacts used in receptacles for stand off mounting.

| SHELL SIZE | CIR 030 | | | CIR 07 | | | CONTACT | CLASS |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | A | B | C | PIN | |
| | ± 0.2 ± .008 | ± 0.5 ± .020 | ± 0.5 ± .020 | ± 0.2 ± .008 | | ± 0.5 ± .020 | [note 4] | |
| | mm / inch | mm / inch | mm / inch | mm / inch | mm / inch | mm / inch | | |
| 10 SL | 2.79 | 11.51 | 2.1 | N/A | N/A | N/A | 48784-16S | YM |
| | .110 | .453 | .083 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 14 S | 3.20 | 10.62 | 1.29 | N/A | N/A | N/A | 48784-16S | YM |
| | .126 | .418 | .051 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 16 S | 3.20 | 10.72 | 1.29 | N/A | N/A | N/A | 48784-16S | YM |
| | .126 | .422 | .051 | | | | | |
| | TBD | TBD | TBD | TBD | TBD | TBD | TBD | YM4 |
| 16 | 3.20 | 15.95 | 5.18 | 4.80 | 6.27 | 1.47 | 46898-1 | YM |
| | .126 | .628 | .20 | .189 | .247 | .058 | | |
| | 3.20 | 17.55 | 6.7 | N/A | N/A | N/A | 46898-2 | YM1 |
| | .126 | .691 | .267 | | | | | |
| 18 | 3.98 | 15.95 | 5.18 | 4.80 | 5.31 | 0.51 | 46898-1 | YM |
| | .157 | .628 | .204 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.78 | 4.80 | 6.91 | 2.11 | 46898-2 | YM1 |
| | .157 | .691 | .267 | .189 | .272 | .083 | | |
| 20 | 3.98 | 15.95 | 5.18 | 4.80 | 5.31 | 0.51 | 46898-1 | YM |
| | .157 | .628 | .204 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.78 | 4.80 | 6.91 | 2.11 | 46898-2 | YM1 |
| | .157 | .691 | .267 | .189 | .272 | .083 | | |
| 22 | 3.98 | 15.95 | 5.18 | 4.80 | 5.31 | 0.51 | 46898-1 | YM |
| | .157 | .628 | .204 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.78 | 4.80 | 6.91 | 2.11 | 46898-2 | YM1 |
| | .157 | .691 | .267 | .189 | .272 | .083 | | |
| 24 | 3.98 | 15.95 | 5.18 | 4.80 | 5.31 | 0.51 | 46898-1 | YM2 |
| | .157 | .628 | .204 | .189 | .209 | .020 | | |
| | 3.98 | 17.55 | 6.78 | 4.80 | 6.91 | 2.11 | 46898-2 | YM |
| | .157 | .691 | .267 | .189 | .272 | .083 | | |
| 28 | 3.98 | 14.96 | 3.3 | N/A | N/A | N/A | 46898-1 | YM2 |
| | .157 | .589 | .130 | | | | | |
| | 3.98 | 16.56 | 4.9 | N/A | N/A | N/A | 46898-2 | YM |
| | .157 | .652 | .193 | | | | | |
| 32 | 3.98 | 14.96 | 1.68 | N/A | N/A | N/A | 46898-1 | YM3 |
| | .157 | .589 | .066 | | | | | |
| | 3.98 | 16.56 | 3.28 | N/A | N/A | N/A | 46898-2 | YM2 |
| | .157 | .652 | .129 | | | | | |
| 36 | 3.98 | 14.96 | 1.68 | N/A | N/A | N/A | 46898-1 | YM3 |
| | .157 | .589 | .066 | | | | | |
| | 3.98 | 16.56 | 3.28 | N/A | N/A | N/A | 46898-2 | YM2 |
| | .157 | .652 | .129 | | | | | |
| 40 | 3.98 | 14.96 | 1.68 | N/A | N/A | N/A | 46898-1 | YM3 |
| | .157 | .589 | .066 | | | | | |
| | 3.98 | 16.56 | 3.28 | N/A | N/A | N/A | 46898-2 | YM2 |
| | .157 | .652 | .129 | | | | | |

Specifications and dimensions subject to change
Dimensions shown in mm.

- Plug or Receptacle shell styles can accommodate either Pin (P) (Male) or Socket (S) (Female) contacts.
- Select Connector Type - Receptacle (ramps = grooves) or Plug (C/N=coupling nut).
- Select Connector Style - 030, 00, 01, 02, 26, 03 07, 070, TB, 06, 064, 065, 08.

| Connector | Shell Style | Description | Reference Drawing Page |
|---|---|---|---|
| | 01 | Inline Receptacle | Page 74-90 |
| | 030 | Front or Rear Panel Mount Square Flange Receptacle<br><br>Maximum panel thickness for rear-mount – see page 169 | Page 94-109 |
| | 05 | Dummy Receptacle Square Flange<br>Same as 020R without threads. | Page 169 |
| | 07 | Jam Nut Receptacle Without Rear Threads | Page 113 |
| | 070 | Jam Nut Receptacle With Rear Threads | Page 114-115 |
| | TB | Thru Bulkhead Receptacle | Page 112 |

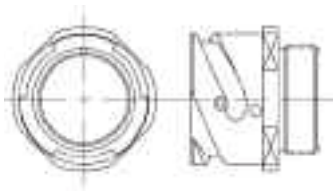
| Connector Type | Mates With |
|---|---|
| CIR 01 | CIR 06, 08, 064, 065-26 |
| CIR 030, 00/02 | CIR 06, 08, 065 |
| CIR 07, 070 | CIR 06, 08, 065 |
| CIR TB | CIR 06, 08, 065 |

Note: For 020R/00 see Section five of additional CIR options on page 175.

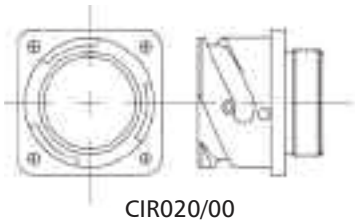
| Connector | Shell Style | Description | Reference Drawing Page |
|---|---|---|---|
| | 06 | Straight Plug | Page 117-153 |
| | 065 | Straight Plug With Extended Heavy Duty Coupling Nut | Page 154-156 |
| | 06GG | Straight Plug With Rubber Covered Coupling Nut | Page 121, 128, 131, 133, 135, 137, 143,147 |
| | 26/064 | Panel Plug | Page 175 |
| | 08 | Right Angle Plug | Page 157-168 |

| Connector Type | Mates With |
|---|---|
| CIR 06 | CIR 01, 00/020, 030, 07, 070, TB |
| CIR 08 | CIR 030, 00/020, 07, 070, TB |
| CIR 26/064 | CIR 01 |
| CIR 065 | CIR 01, 00/020, 03, 030, 07, 070, TB |
| CIR 06..GG | CIR...00/020 RFS |

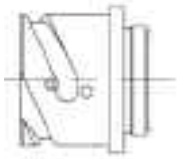
# Classes For Terminating Individual Wires



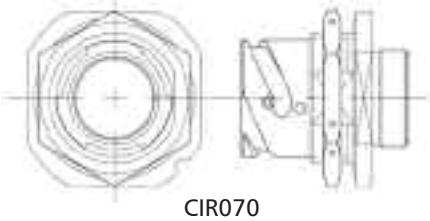
CIR01...



CIR020/00



CIR030
CIR030FP, CIR030UN



CIR070

## Mounting Hole Options (refer to pages 173 & 174)

FP Suffix — Applicable for rear mount only.
Can be added to any class where the application requires the flange with thru mounting holes.
Example: CIR030RVFP-20-4P-F80 TABLE 1 (Refer to page 174)
Note: If FP is not listed, the mounting holes are threaded (metric thread).

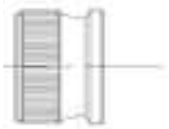
UN Suffix — Applicable for rear mount only.
Can be added to any class where application requires the flange with threaded holes.
Example: CIR030RVUN-20-4P-F80 TABLE 2 (Refer to page 174)

NOTE: Mounting holes are threaded (UN thread)

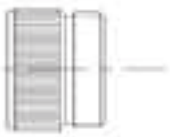
FF Suffix — Applicable for front mount only Can be added to any class where application requires flange with threaded hole (metric thread).

FS Suffix — Applicable for front mount only. Can be added to any class where application requires the 90° chamfered mounting holes to prevent screws from interfering with the rubber covered coupling nut during the mating process. Used with metric screws.
Example: CIR00RVFS-20-4P-F80 TABLE 3 (Refer to page 174)

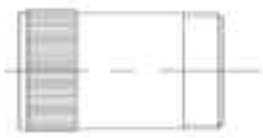
FSM Suffix — Applicable for front mount only. Can be added to any class where application requires the 82° chamfered mounting holes to prevent screws from interfering with the rubber covered coupling nut during the mating process. Used with UN screws.
Example: CIR00RVFSM-20-4P-F80 TABLE 3 (Refer to page 174)



| | | |
|---|---|---|
| ARV CLASS..... | Short backshell without grommet or provision for accessories | Non-environment proof. |
| RV CLASS..... | Short backshell with wire sealing grommet and and compression ring. Refer to page 104 for dimensions | Environment proof. |

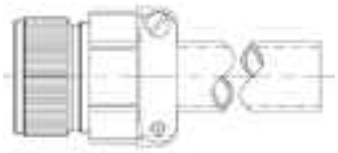


| | | |
|---|---|---|
| A CLASS..... | Short backshell, no other accessories. | Non-environment proof. |
| R CLASS..... | Same as A but includes wire sealing grommet and compression ring. | Environment proof. |
| EXCEPTION: | CIR020R, CIR07R includes shell, insert and contacts only (backshell hardware is not included). Refer to page 97 for dimensions. | |

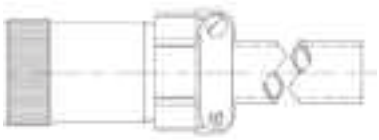


| | | |
|---|---|---|
| AL/LA CLASS..... | Long backshell, no other accessories. | Non-environment proof. |
| RL/LR CLASS..... | Same as AL/LA but includes wire sealing grommet and compression ring. Refer to page 71 for dimensions. | Environment proof. |

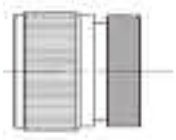
# Classes For Terminating Individual Wires



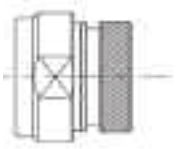
AF CLASS..... Short backshell, with A style clamp and bushing. Non-environment proof.
F CLASS..... Same as AF but includes wire sealing grommet. Environment proof.
and compression ring.
Refer to page 97 for dimensions.



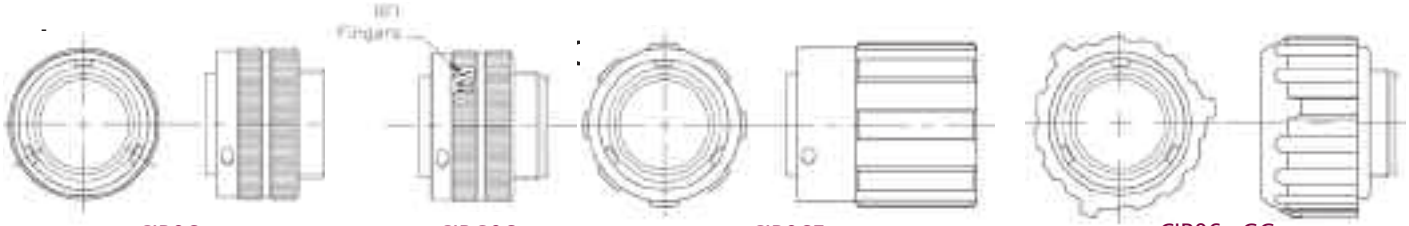
LAF CLASS..... Long backshell with A style clamp and bushing. Non-environment proof.
LF CLASS..... Same as LAF but includes wire sealing grommet Environment proof.
and compression ring.
Refer to page 78 for dimensions.



AG CLASS..... Includes the backshell suitable for heat shrink. Non-environment proof.
tubing.
G CLASS..... Same as AG but includes wire sealing grommet Environment proof.
and compression ring.
Refer to page 98 for dimensions.



AG2 CLASS..... Includes the swivel backshell suitable for heat. Non-environment proof.
shrink tubing.
G2 CLASS..... Same as AG2 but includes wire sealing grommet Environment proof.
Refer to page 99 for dimensions.

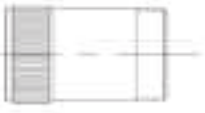


CIR06... CIRG06... CIR065... CIR06...GG

| | | |
|---|---|---|
| ARV CLASS..... | Short backshell without wire sealing grommet. | Non-environment proof. |
| ARVG CLASS..... | Same as ARV but with rubber covered coupling nut. | Non-environment proof. |
| RV CLASS..... | Short backshell with wire sealing grommet and compression ring. | Environment proof. |
| RVGG CLASS..... | Same as RV but with rubber covered coupling nut. Refer to page 149 for dimensions. | Environment proof. |

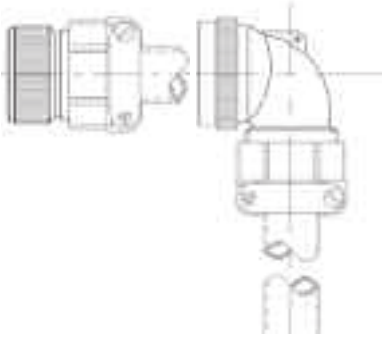
CIR06..straight CIR08...90°

| | | |
|---|---|---|
| A CLASS..... | Straight short or 90° backshell, no other accessories. | Non-environment proof. |
| AGG CLASS..... | Same as A but with rubber covered coupling nut. | Non-environment proof. |
| R CLASS..... | Same as A but includes wire sealing grommet and compression ring. | Environment proof. |
| RGG CLASS..... | Same as R but with rubber covered coupling nut. Refer to page 144 for dimensions. | Environment proof. |

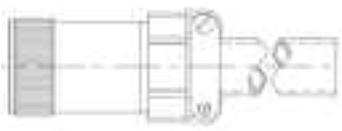


| | | |
|---|---|---|
| AL/LA CLASS..... | Long backshell, no other accessories. | Non-environment proof. |
| ALGG/LAGG CLASS... | Same as AL/LA but with rubber covered coupling nut. | Non-environment proof. |
| RL/LR CLASS..... | Same as AL/LA but includes wire sealing grommet and compression ring. | Environment proof. |
| RLGG/LRGG CLASS... | Same as RL/LR but with rubber covered coupling nut. Refer to page 147 for dimensions. | Environment proof. |

CIR06..straight CIR08...90°



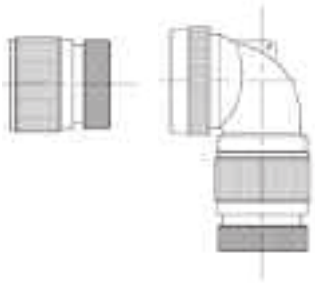
| | | |
|---|---|---|
| AF CLASS..... | Straight short or 90° backshell with A style clamp and bushing. | Non-environment proof. |
| AFGG CLASS..... | Same as AF but with rubber covered coupling nut. | Non-environment proof. |
| F CLASS..... | Same as AF but includes wire sealing grommet and compression ring. | Environment proof. |
| FGG CLASS..... | Same as F but with rubber covered coupling nut. Refer to page 129 for dimensions. | Environment proof. |



| | | |
|---|---|---|
| LAF CLASS..... | Long backshell with A style clamp and bushing. | Non-environment proof. |
| LAFGG CLASS..... | Same as LAF but with rubber covered coupling nut. | Non-environment proof. |
| LF CLASS..... | Same as LAF but includes wire sealing grommet and compression ring. | Environment proof. |
| LFGG CLASS..... | Same as LF but with rubber covered coupling nut. Refer to page 138 for dimensions. | Environment proof. |

# Classes For Terminating Individual Wires

CIR06..straight CIR08...90°



AG CLASS..... Includes a backshell that is suitable for heat shrink tubing. Non-environment proof.

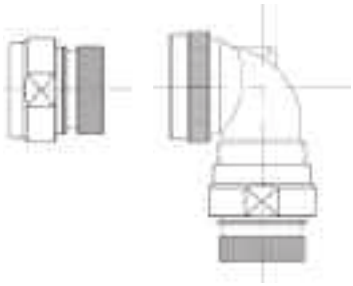
AGGG CLASS..... Same as AG but with rubber covered coupling nut. Non-environment proof.

G CLASS..... Same as AG but includes wire sealing grommet and compression ring. Environment proof.

GGG..... Same as G but with rubber covered coupling nut. Environment proof.

Refer to page 135 for dimensions.

CIR06..straight CIR08...90°



AG2 CLASS..... Includes positively locked backshells with the swivel coupling nut and for use with heat shrink tubing. Non-environment proof.

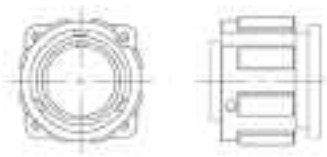
AG2GG CLASS..... Same as AG2 but with rubber covered coupling nut. Non-environment proof.

G2 CLASS..... Same as AG2 but includes wire sealing grommet. Environment proof.

G2GG CLASS..... Same as G2 but with rubber covered coupling nut. Environment proof.

Refer to page 131 for dimensions.

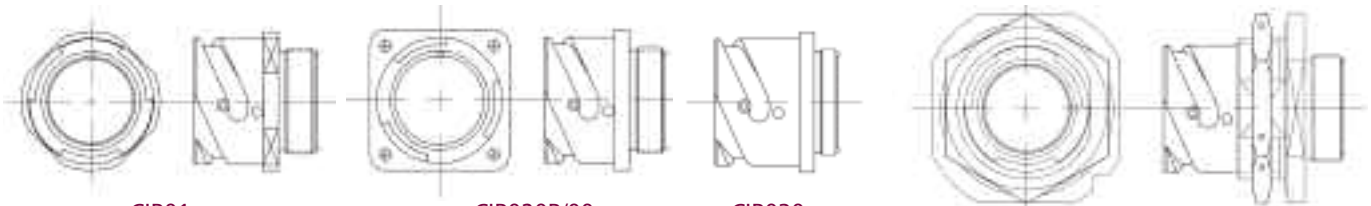
CIR064PP/CIR26



PP CLASS..... Plug that includes a square flange for panel mount. No rear threads for accessories. Environment proof if used with panel sealing gasket.

Refer to page 175 for dimensions.

# Classes For Terminating Jacketed Cable



CIR01 CIR020R/00 CIR030 CIR030FP CIR030UN CIR070

## Mounting Hole Options (refer to pages 179 & 180)

**FP Suffix**

Applicable for rear mount only.
Can be added to any class where the application requires the flange with thru mounting holes.
Example: CIR030RVFP-20-4P-F80 TABLE 1 (Refer to page 180)
Note: If FP is not listed, the mounting holes are threaded (metric thread). TABLE 2 (Refer to page 180)

**UN Suffix**

Applicable for rear mounting only.
Can be added to any class where application requires the flange with threaded holes.
Example: CIR030RVUN-20-4P-F80 TABLE 2 (Refer to page 180)
NOTE: Mounting holes are threaded (UN thread)

**FF Suffix**

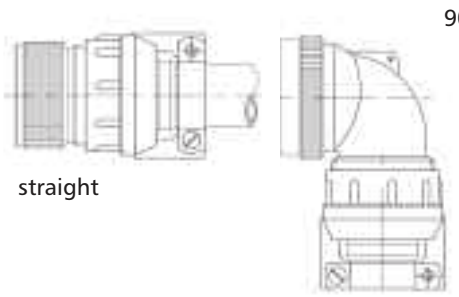
Applicable for front mounting only. Can be added to any class where application requires flange with threaded holes (metric thread).

**FS Suffix**

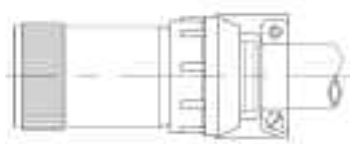
Applicable for front mount only. Can be added to any class where application requires the 90° chamfered mounting holes to prevent screws from interfering with the rubber covered coupling nut during the mating process. Used with metric screws.
Example: CIR00RVFS-20-4P-F80 TABLE 3 (Refer to page 180)

**FSM Suffix**

Applicable for front mount only. Can be added to any class where application requires the 82° chamfered mounting holes to prevent screws from interfering with the rubber covered coupling nut during the mating process. Used with UN screws.
Example: CIR00RVFSM-20-4P-F80 TABLE 3 (Refer to page 180)



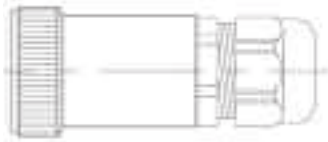

| | | |
|---|---|---|
| CF CLASS.... ..... | Straight short backshell with C style clamp. | Environment proof. |
| CFZ CLASS..... | Same as CF but includes wire sealing grommet and compression ring. | Environment proof. |



| | | |
|---|---|---|
| LCF CLASS..... | Long backshell with C style clamp. | Environment proof. |
| LCFZ CLASS. ..... | Same as LCF but includes wire sealing grommet and compression ring. | Environment proof. |

# Classes For Terminating Jacketed Cable

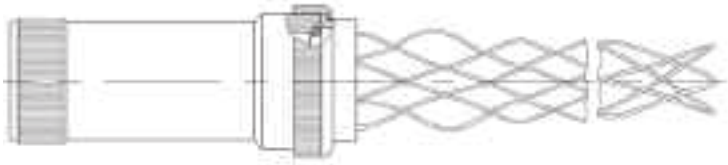
SL



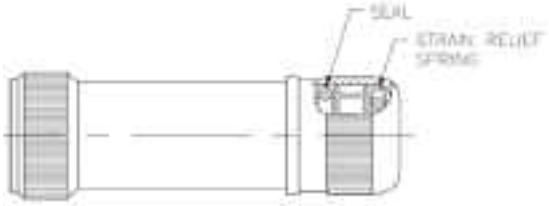
| | | |
|---|---|---|
| SL CLASS..... | Long metal backshell with non-metallic fitting with PG thread. | Environment proof. |
| SL1 CLASS..... | Same as SL but includes wire sealing grommet and compression ring. | Environment proof. |

SLX

| | | |
|---|---|---|
| SLX CLASS..... | Same as SL but with non-metallic spiral fitting with PG thread (to prevent sharp angle bending). | Environment proof. |

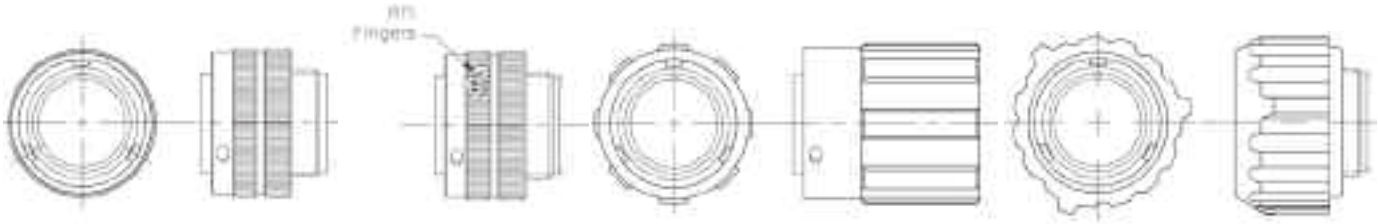


| | | |
|---|---|---|
| LC CLASS..... | Long LC backshell with internal adapter suitable for various sizes of cable, grommet, commpression ring and cord grip included. | Environment proof. |
| LC3 CLASS..... | Same as LC but with rubber covered coupling nut | Environment proof. |
| LCG CLASS..... | Same as LC but without the wire sealing grommet and compression ring. | Environment proof. |

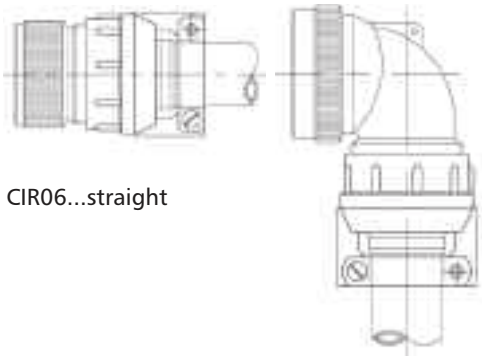



| | | |
|---|---|---|
| WN/WK CLASS..... | Long WK backshell and backnut assembly suitable to seal and grip on the jacket of the cable. | Environment proof. |
| WN/WKG CLASS..... | Same as WK but with wire sealing grommet and compression ring. | Environment proof. |

# Classes For Terminating Jacketed Cable

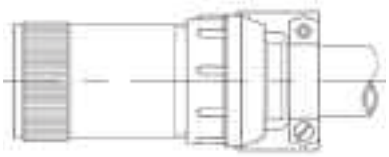


CIR06... CIRG06... CIR065.. CIR06...GG

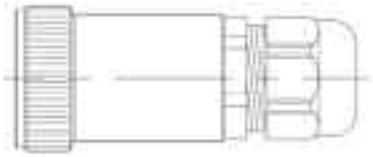


CIR06...straight CIR08...90°

| | | |
|---|---|---|
| CF CLASS..... | Straight short or 90° backshell with C style clamp. | Environment proof. |
| CFGG CLASS..... | Same as CF but with rubber covered coupling nut. | Environment proof. |
| CFZ CLASS..... | Same as CF but includes wire sealing grommet and compression ring. | Environment proof. |
| CFZGG CLASS..... | Same as CFZ but with rubber covered coupling nut. | Environment proof. |



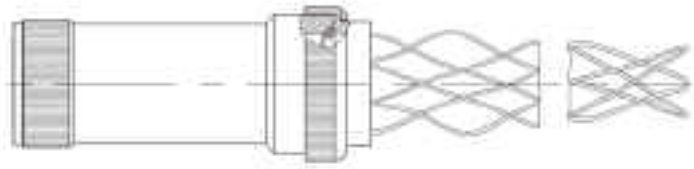
| | | |
|---|---|---|
| LCF CLASS..... | Long backshell with C style clamp. | Environment proof. |
| LCFGG CLASS..... | Same as LCF but with rubber covered coupling nut. | Environment proof. |
| LCFZ CLASS..... | Same as LCF but includes wire sealing grommet and compression ring. | Environment proof. |
| LCFZGG CLASS... | Same as LCFZ but with rubber covered coupling nut. | Environment proof. |



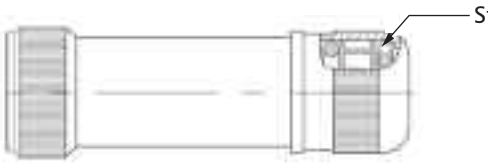
| | | |
|---|---|---|
| SL CLASS..... | Long metal backshell with non-metallic fitting with PG thread. | Environment proof. |
| SLGG CLASS..... | Same as SL but with rubber covered coupling nut. | Environment proof. |
| SL1 CLASS..... | Same as SL but includes wire sealing grommet and compression ring. | Environment proof. |

| | | |
|---|---|---|
| SLX CLASS..... | Same as SL but with non-metallic spiral fitting with PG thread (to prevent sharp angle bending). | Environment proof. |

# Classes For Terminating Jacketed Cable



| | | |
|---|---|---|
| LC CLASS..... | Long LC backshell with internal adapter suitable for various sizes of cable, grommet and a cord grip included. | Environment proof. |
| LCGG CLASS..... | Same as LC but with rubber covered coupling nut. | Environment proof. |
| LCG CLASS..... | Same as LC but without the wire sealing grommet and compression ring. | Environment proof. |
| LCGGG CLASS..... | Same as LCG but with rubber covered coupling nut. | Environment proof. |

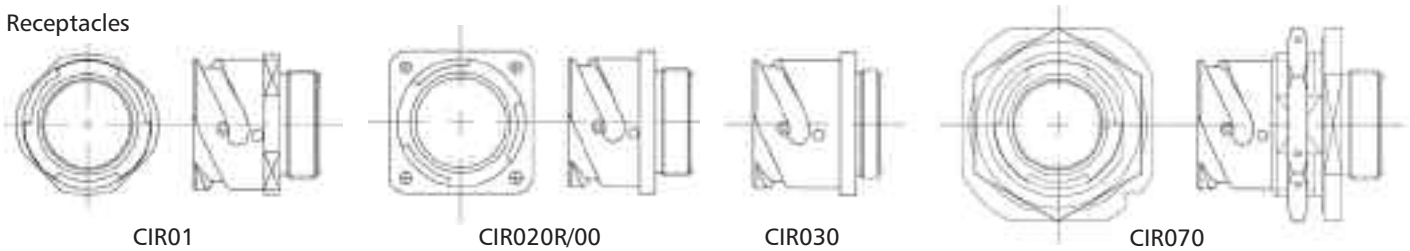



| | | |
|---|---|---|
| WK CLASS..... | Long WK backshell and backnut assembly suitable to seal and grip on the jacket of the cable. | Environment proof. |
| WN/WKG CLASS..... | Same as WK but with wire sealing grommet and compression ring. | Environment proof. |
| WK3 CLASS..... | Same as WK but with rubber covered coupling nut. | Environment proof. |

Specifications and dimensions subject to change
Dimensions shown in mm.

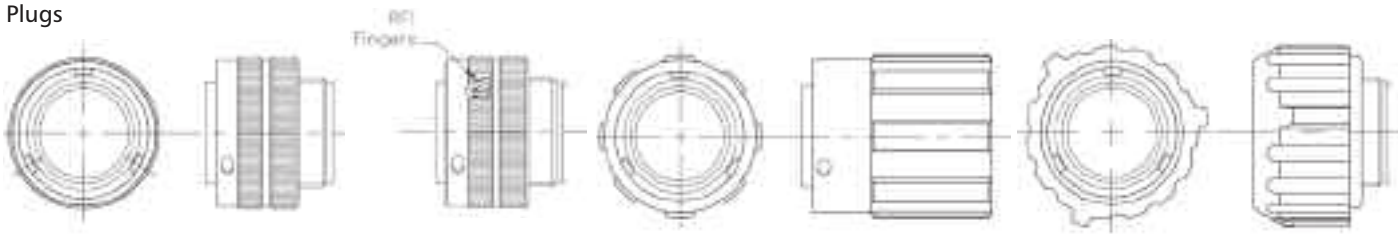
# Classes For Terminating Braided Shield

Receptacles

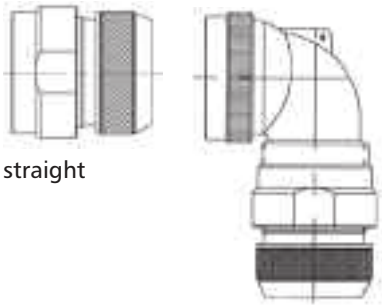


CIR01 | CIR020R/00 | CIR030, CIR030FP, CIR030UN | CIR070

Plugs



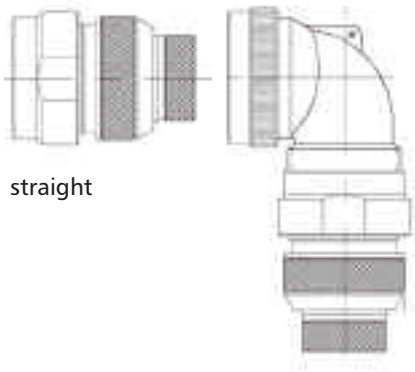

CIR06... | CIRG06... | CIR065... | CIR06...GG



straight | 90°

SB CLASS..... Straight or 90° backshell with the swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The shield is terminated and secured with the wire prior to tightening the backnut. Wire sealing grommet is included. Recommended to use with RFI fingers in CIRG06SB/CIRG08SB. Environment proof.

ASB CLASS..... Same as SB but without the grommet . Environment proof.



straight | 90°

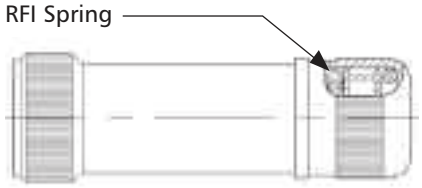
SBT CLASS.... Similar to SB but the backshell includes a knurled extension for the shield termination via tinel lock ring (not supplied). Environment proof.

ASBT CLASS... Same as SBT but without the grommet . Environment proof.

Refer to page 106 for receptacle dimensions.
Refer to page 152 for plug dimensions.

WCML.....Consult Factory

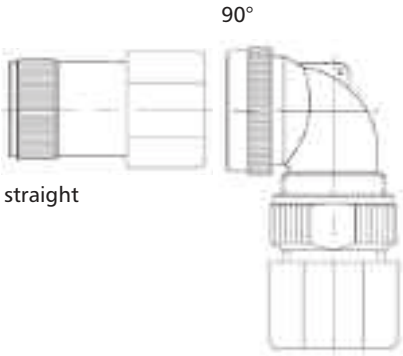
RFI Spring



WK1 CLASS... Long WK backshell, grommet and backnut assembly suitable for shield termination and strain relief of jacket. Environment proof.

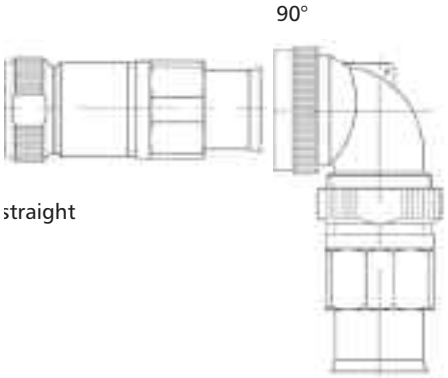
Refer to page 108 for receptacle dimensions.
Refer to page 152 for plug dimensions.

# Classes For Terminating Conduit




## EF TYPE ANACONDA SEALTITE CONDUIT

| | | |
|---|---|---|
| RK CLASS..... | Straight long or 90° RK backshell with adapter and backnut assembly to seal and grip on the jacket of a steel core flexible EF type Anaconda sealtite conduit. Class includes a wire sealing grommet and compression ring. | Environment proof. |
| ARK CLASS..... | Same as RK class but without the wire sealing grommet and compression ring. | Environment proof. |
| RKGG CLASS..... | Same as RK but with rubber covered coupling nut (applicable for plugs only).<br>Refer to page 103 for receptacle dimensions.<br>Refer to page 142 for plug dimensions. | Environment proof. |

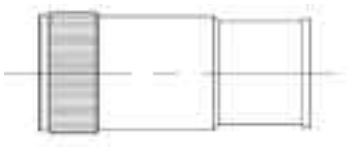



## CNP TYPE ANACONDA SEALTITE CONDUIT

| | | |
|---|---|---|
| NM CLASS..... | Straight long or 90° NM backshell with adapter and-backnut assembly to seal and grip on the jacket of a non-metallic flexible CNP type Anaconda sealtite conduit . Class includes a wire sealing grommet and compression ring. | Environment proof. |
| NMG CLASS..... | Same as NM but without the wire sealing grommet and compression ring. | Environment proof. |
| NMGG CLASS.... | Same as NM but with rubber covered coupling nut (applicable for plugs only).<br>Refer to page 139 for plug dimensions. | Environment proof. |

Specifications and dimensions subject to change
Dimensions shown in mm.

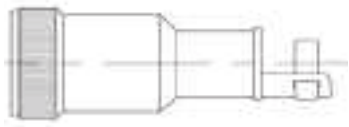
# Classes For Terminating Conduit



## FLEXIBLE RUBBER HOSE

BC CLASS..... Long metal backshell with the rear lip suitable for Flexible rubber conduit (hose) being secured to the backshell by a metal band or a hose clamp. Environment proof.

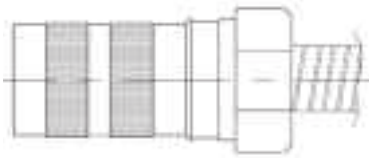
Refer to page 139 for plug dimensions.



## FLEXIBLE RUBBER HOSE

LP CLASS..... Similar backshell to BC but with extended rear for the mechanical strain relief of individual wires within the conduit. Flexible rubber conduit (hose) is being secured to the backshell by a metal band or a hose clamp. Environment proof.

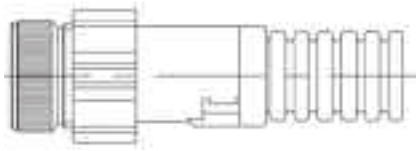
Refer to page 138 for plug dimensions.



## ELECTRI-FLEX CONDUIT

CMEG CLASS..... Includes the backshell hardware suitable for flexible metal core Electri-flex conduit Class includes a wire sealing grommet and compression ring. Environment proof.

Refer to page 126 for plug dimensions.



## PMA CONDUIT

PIRAG CLASS.....Suitable for PMA Conduit via BVIRA fitting. Environment proof.

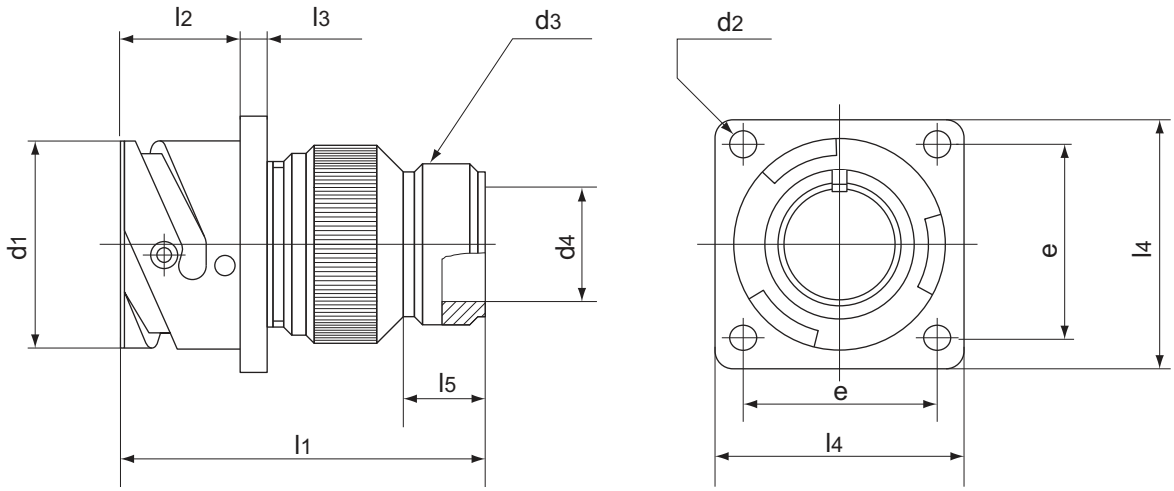
PIRB CLASS..... Suitable for PMA Conduit via BVIRB fitting. Environment proof.

PIVG CLASS..... Suitable for PMA Conduit via BVIVG fitting. Environment proof.

PILJ CLASS..... Suitable for PMA Conduit via BFILJ fitting. Environment proof.

Refer to page 140 for plug dimensions

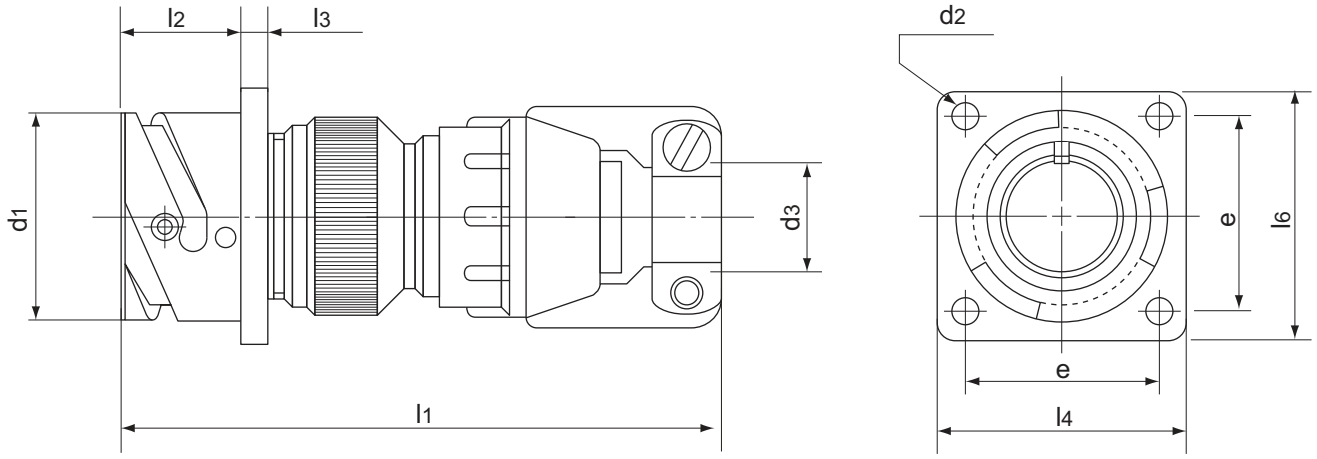
Receptacle with through mounting holes and backshell. For threaded and countersunk mounting holes type, see page 197.
R type has individual wire sealing grommet.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ Thread in inches | $d_4$ +0,1 -0 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 5/8-24 UNEF-2A | 10,4 | 18,2 | 43,0 | 14,2 | 2,8 | 25,4 | 9,5 |
| | 0.72 | 0.126 | | 0.41 | 0.717 | 1.69 | 0.559 | 0.110 | 1.00 | 0.37 |
| 14S | 24,6 | 3,2 | 3/4-20 UNEF-2A | 13,2 | 23,0 | 47,0 | 14,2 | 3,2 | 30,0 | 9,5 |
| | 0.97 | 0.126 | | 0.52 | 0.906 | 1.85 | 0.559 | 0.126 | 1.181 | 0.37 |
| 16S | 27,4 | 3,2 | 7/8-20 UNEF-2A | 16,2 | 24,6 | 47,0 | 14,2 | 3,2 | 32,5 | 9,5 |
| | 1.08 | 0.126 | | 0.64 | 0.969 | 1.85 | 0.559 | 0.126 | 1.280 | 0.37 |
| 16 | 27,4 | 3,2 | 7/8-20 UNEF-2A | 16,2 | 24,6 | 58,0 | 19,0 | 3,2 | 32,5 | 9,5 |
| | 1.08 | 0.126 | | 0.64 | 0.969 | 2.28 | 0.748 | 0.126 | 1.280 | 0.37 |
| 18 | 30,8 | 3,2 | 1"-20 UNEF-2A | 19,2 | 27,0 | 58,0 | 19,0 | 4,0 | 35,0 | 9,5 |
| | 1.21 | 0.126 | | 0.76 | 1.063 | 2.28 | 0.748 | 0.157 | 1.378 | 0.37 |
| 20 | 34,2 | 3,2 | 1"3/16-18 UNEF-2A | 22,0 | 29,4 | 58,0 | 19,0 | 4,0 | 38,0 | 9,5 |
| | 1.35 | 0.126 | | 0.87 | 1.157 | 2.28 | 0.748 | 0.157 | 1.496 | 0.37 |
| 22 | 37,4 | 3,2 | 1"3/16-18 UNEF-2A | 24,5 | 31,8 | 59,0 | 19,0 | 4,0 | 41,0 | 9,5 |
| | 1.47 | 0.126 | | 0.97 | 1.252 | 2.32 | 0.748 | 0.157 | 1.614 | 0.37 |
| 24 | 40,9 | 3,7 | 1"7/16-18 UNEF-2A | 27,8 | 34,9 | 61,0 | 20,6 | 4,0 | 44,5 | 9,5 |
| | 1.61 | 0.146 | | 1.09 | 1.374 | 2.40 | 0.811 | 0.157 | 1.752 | 0.37 |
| 28 | 46,7 | 3,7 | 1"7/16-18 UNEF-2A | 31,2 | 39,7 | 67,0 | 20,6 | 4,0 | 50,8 | 9,5 |
| | 1.84 | 0.146 | | 1.23 | 1.563 | 2.64 | 0.811 | 0.157 | 2.000 | 0.37 |
| 32 | 53,4 | 4,3 | 1"3/4-18 UNS-2A | 37,8 | 44,5 | 71,0 | 22,2 | 4,0 | 57,0 | 11,0 |
| | 2.10 | 0.169 | | 1.49 | 1.752 | 2.80 | 0.874 | 0.157 | 2.244 | 0.43 |
| 36 | 59,6 | 4,3 | 2"-18 UNS-2A | 45,0 | 49,2 | 71,0 | 22,2 | 4,0 | 63,5 | 11,8 |
| | 2.35 | 0.169 | | 1.77 | 1.937 | 2.80 | 0.874 | 0.157 | 2.500 | 0.47 |
| 40 | 65,5 | 4,3 | 2"1/4-16 UN-2A | 51,2 | 55,5 | 86,0 | 22,2 | 4,0 | 69,9 | 11,8 |
| | 2.58 | 0.169 | | 2.02 | 2.185 | 3.39 | 0.874 | 0.157 | 2.752 | 0.47 |

Dimensions are mm. over inches

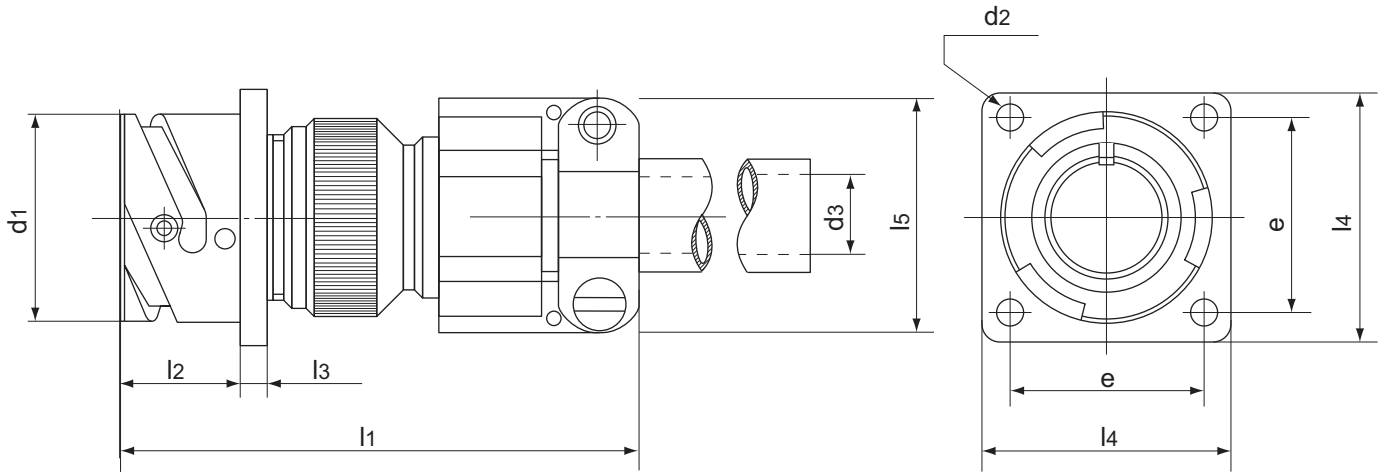
Receptacle with through mounting holes and cable clamp for jacketed cables. CFZ type includes an individual wire sealing grommet. For threaded and countersunk mounting holes type, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ open | $d_3$ closed | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 7,93 | 2,38 | 18,2 | 73 | 14,2 | 2,8 | 25,4 |
| | .72 | .126 | .312 | .094 | .717 | 2.87 | .559 | .110 | 1.00 |
| 14S | 24,6 | 3,2 | 11,12 | 6,35 | 23,0 | 77 | 14,2 | 3,2 | 30,0 |
| | .97 | .126 | .438 | .25 | .906 | 0.30 | .559 | .126 | 1.181 |
| 16S | 27,4 | 3,2 | 13,48 | 8 | 24,6 | 77 | 14,2 | 3,2 | 32,5 |
| | 1.08 | .126 | .531 | .315 | .969 | 0.30 | .559 | .126 | 1.280 |
| 16 | 27,4 | 3,2 | 13,48 | 8 | 24,6 | 88 | 19,0 | 3,2 | 32,5 |
| | 1.08 | .126 | .531 | .315 | .969 | 3.49 | .748 | .126 | 1.280 |
| 18 | 30,8 | 3,2 | 15,87 | 9,6 | 27,0 | 91 | 19,0 | 4,0 | 35,0 |
| | 1.21 | .126 | .625 | .375 | 1.063 | 3.58 | .748 | .157 | 1.378 |
| 20 | 34,2 | 3,2 | 19,0 | 11,3 | 29,4 | 91 | 19,0 | 4,0 | 38,0 |
| | 1.35 | .126 | .748 | .445 | 1.157 | 3.58 | .748 | .157 | 1.496 |
| 22 | 37,4 | 3,2 | 19,0 | 11,3 | 31,8 | 92 | 19,0 | 4,0 | 41,0 |
| | 1.47 | .126 | .748 | .445 | 1.252 | 3.62 | .748 | .157 | 1.614 |
| 24 | 40,9 | 3,7 | 23,8 | 15,5 | 34,9 | 97 | 20,6 | 4,0 | 44,5 |
| | 1.61 | .146 | .938 | .610 | 1.374 | 3.82 | .811 | .157 | 1.752 |
| 28 | 46,7 | 3,7 | 23,8 | 15,5 | 39,7 | 103 | 20,6 | 4,0 | 50,8 |
| | 1.84 | .146 | .938 | .610 | 1.563 | 4.05 | .811 | .157 | 2.000 |
| 32 | 53,4 | 4,3 | 31,75 | 23,4 | 44,5 | 113 | 22,2 | 4,0 | 57,0 |
| | 2.10 | .169 | 1.250 | .921 | 1.752 | 4.45 | .874 | .157 | 2.244 |
| 36 | 59,6 | 4,3 | 35,0 | 23,4 | 49,2 | 120 | 22,2 | 4,0 | 63,5 |
| | 2.35 | .169 | 1.378 | .921 | 1.937 | 4.72 | .874 | .157 | 2.500 |
| 40 | 65,5 | 4,3 | 41,5 | 29,9 | 55,5 | 135 | 22,2 | 4,0 | 69,9 |
| | 2.58 | .169 | 1.625 | 1.177 | 2.185 | 5.31 | .874 | .157 | 2.752 |

Dimensions are mm. over inches

Receptacle with through mounting holes, individual wire sealing grommet and cable clamp with bushing. AF type has no grommet. For threaded and countersunk mounting holes type, see page 197.

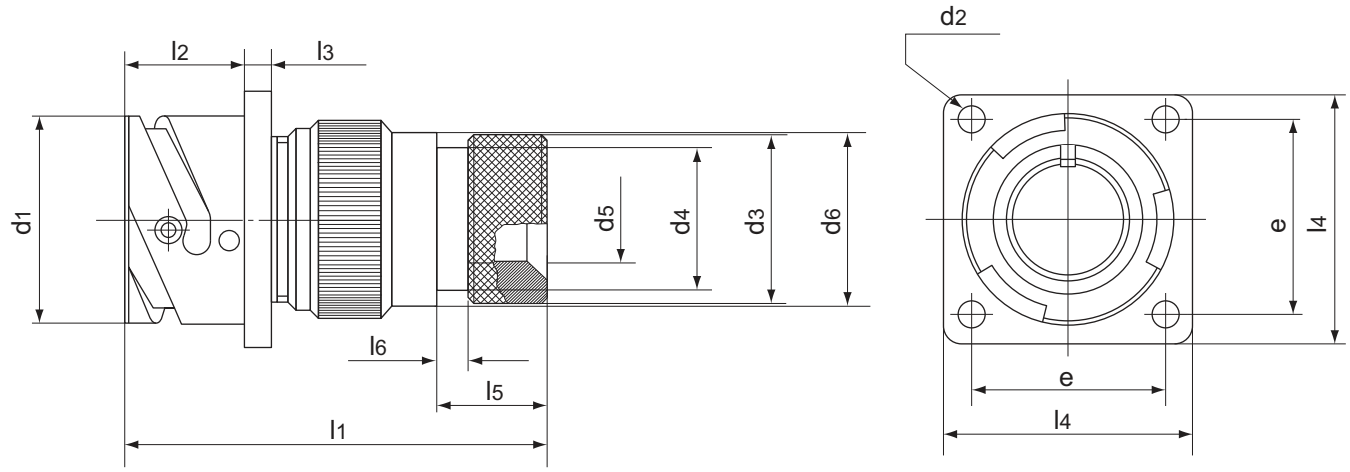



| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ * max | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ max. |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 5,6 | 18,2 | 64 | 14,2 | 2,8 | 25,4 | 22,7 |
| | .72 | .126 | .22 | .717 | 2.52 | .559 | .110 | 1.00 | .89 |
| 14S | 24,6 | 3,2 | 7,9 | 23,0 | 69 | 14,2 | 3,2 | 30,0 | 27,5 |
| | .97 | .126 | .31 | .906 | 2.72 | .559 | .126 | 1.181 | 1.08 |
| 16S | 27,4 | 3,2 | 11,0 | 24,6 | 71 | 14,2 | 3,2 | 32,5 | 30,0 |
| | 1,08 | .126 | .44 | .969 | 2.79 | .559 | .126 | 1.280 | 1.18 |
| 16 | 27,4 | 3,2 | 11,0 | 24,6 | 82 | 19,0 | 3,2 | 32,5 | 30,0 |
| | 1,08 | .126 | .44 | .969 | 3.23 | .748 | .126 | 1.280 | 1.18 |
| 18 | 30,8 | 3,2 | 14,2 | 27,0 | 82 | 19,0 | 4,0 | 35,0 | 32,2 |
| | 1.21 | .126 | .56 | 1.063 | 3.23 | .748 | .157 | 1.378 | 1.27 |
| 20 | 34,2 | 3,2 | 15,8 | 29,4 | 82 | 19,0 | 4,0 | 38,0 | 37,5 |
| | 1.35 | .126 | .63 | 1.157 | 3.23 | .748 | .157 | 1.496 | 1.48 |
| 22 | 37,4 | 3,2 | 15,8 | 31,8 | 83 | 19,0 | 4,0 | 41,0 | 37,5 |
| | 1.47 | .126 | .63 | 1.252 | 3.23 | .748 | .157 | 1.614 | 1.48 |
| 24 | 40,9 | 3,7 | 19,0 | 34,9 | 87 | 20,6 | 4,0 | 44,5 | 43,3 |
| | 1.61 | .146 | .75 | 1.374 | 3.42 | .811 | .157 | 1.752 | 1.71 |
| 28 | 46,7 | 3,7 | 19,0 | 39,7 | 93 | 20,6 | 4,0 | 50,8 | 43,3 |
| | 1.84 | .146 | .75 | 1.563 | 3.66 | .811 | .157 | 2.0 | 1.71 |
| 32 | 53,4 | 4,3 | 23,8 | 44,5 | 99 | 22,2 | 4,0 | 57,0 | 51,7 |
| | 2.10 | .169 | .94 | 1.752 | 3.90 | .874 | .157 | 2.244 | 2.04 |
| 36 | 59,6 | 4,3 | 31,7 | 49,2 | 100 | 22,2 | 4,0 | 63,5 | 58,0 |
| | 2.35 | .169 | 1.25 | 1.937 | 3.90 | .874 | .157 | 2.5 | 2.28 |
| 40 | 65,5 | 4,3 | 34,9 | 55,5 | 128 | 22,2 | 4,0 | 69,9 | 68,5 |
| | 2.58 | .169 | 1.38 | 2.185 | 5.04 | .874 | .157 | 2.752 | 2.69 |

* Max. permissible outside diameter of cable.

Dimensions are mm. over inches

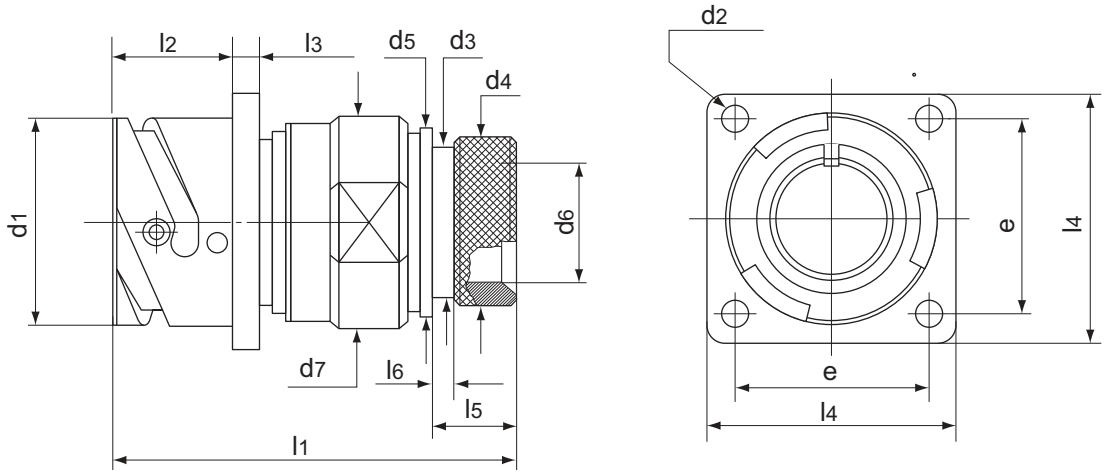
Receptacle with through mounting holes, individual wire sealing grommet and backshell for heat shrinkable tubing. AG type has no grommet. For threaded and countersunk mounting holes type, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ ±0,2 | $d_4$ max. | $d_5$ ±0,1 | $d_6$ ±0,2 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 15,5 | 13,3 | 7,9 | 17,0 | 18,2 | 48 | 14,2 | 2,8 | 25,4 | 11,7 | 3,5 |
| | .72 | .126 | .610 | .52 | 0.31 | .669 | .717 | 1.89 | .559 | .110 | 1.00 | .461 | .138 |
| 14S | 24,6 | 3,2 | 19,1 | 17,0 | 10,8 | 20,1 | 23,0 | 48 | 14,2 | 3,2 | 30,0 | 11,7 | 3,5 |
| | .97 | .126 | .752 | .66 | 0.42 | .791 | .906 | 0.89 | .559 | .126 | 1.181 | .461 | .138 |
| 16S | 27,4 | 3,2 | 23,9 | 21,9 | 13,7 | 23,5 | 24,6 | 48 | 14,2 | 3,2 | 32,5 | 11,7 | 3,5 |
| | 1.08 | .126 | .941 | .86 | 0.54 | .925 | .969 | 1.89 | .559 | .126 | 1.280 | .461 | .138 |
| 16 | 27,4 | 3,2 | 23,9 | 21,9 | 13,7 | 23,5 | 24,6 | 60 | 19,0 | 3,2 | 32,5 | 11,5 | 3,5 |
| | 1.08 | .126 | .941 | .86 | 0.54 | .925 | .969 | 2.36 | .748 | .126 | 1.280 | .453 | .138 |
| 18 | 30,8 | 3,2 | 23,9 | 21,9 | 14,8 | 26,5 | 27,0 | 60 | 19,0 | 4,0 | 35,0 | 11,5 | 3,5 |
| | 1.21 | .126 | .941 | .86 | 0.58 | 1.043 | 1.063 | 2.36 | .748 | .157 | 1.378 | .453 | .138 |
| 20 | 34,2 | 3,2 | 29,6 | 26,2 | 18,9 | 30,2 | 29,4 | 65 | 19,0 | 4,0 | 38,0 | 12,4 | 3,5 |
| | 1.35 | .126 | 1.165 | 1.03 | 0.74 | 1.189 | 1.157 | 2.56 | .748 | .157 | 1.496 | .488 | .138 |
| 22 | 37,4 | 3,2 | 29,6 | 26,2 | 21 | 33,6 | 31,8 | 65 | 19,0 | 4,0 | 41,0 | 12,4 | 3,5 |
| | 1.47 | .126 | 1.165 | 1.03 | 0.83 | 1.323 | 1.252 | 2.56 | .748 | .157 | 1.614 | .488 | .138 |
| 24 | 40,9 | 3,7 | 37,8 | 34,5 | 24,8 | 36,1 | 34,9 | 65 | 20,6 | 4,0 | 44,5 | 12,7 | 3,5 |
| | 1.61 | .146 | 1.488 | 1.35 | 0.98 | 1.421 | 1.374 | 2.56 | .811 | .157 | 1.752 | .500 | .138 |
| 28 | 46,7 | 3,7 | 37,8 | 34,5 | 27,2 | 41,4 | 39,7 | 65 | 20,6 | 4,0 | 50,8 | 12,7 | 3,5 |
| | 1.84 | .146 | 1.488 | 1.35 | 1.07 | 1.63 | 1.563 | 2.56 | .811 | .157 | 2.000 | .500 | .138 |
| 32 | 53,4 | 4,3 | 47,8 | 43,6 | 33,5 | 48,6 | 44,5 | 70 | 22,2 | 4,0 | 57,0 | 15,2 | 3,5 |
| | 2.10 | .169 | 1.882 | 1.71 | 1.32 | 1.913 | 1.752 | 2.75 | .874 | .157 | 2.244 | .598 | .138 |
| 36 | 59,6 | 4,3 | 47,8 | 43,6 | 38,7 | 54,8 | 49,2 | 75 | 22,2 | 4,0 | 63,5 | 15,2 | 3,5 |
| | 2.35 | .169 | 1.882 | 1.71 | 1.52 | 2.157 | 1.937 | 2.95 | .874 | .157 | 2.500 | .598 | .138 |
| 40 | 65,5 | 4,3 | 57,8 | 52,6 | 48,2 | 60,9 | 55,5 | 77 | 22,2 | 4,0 | 69,9 | 15,2 | 3,5 |
| | 2.58 | .169 | 2.276 | 2.07 | 1.90 | 2.402 | 2.185 | 3.03 | .874 | .157 | 2.752 | .610 | .138 |

Dimensions are mm. over inches

Receptacle with through mounting holes, individual wire sealing grommet and a two piece swivel backshell for heat shrinkable tubing. For threaded and countersunk mounting holes, see page 197. AG2 type has no grommet.

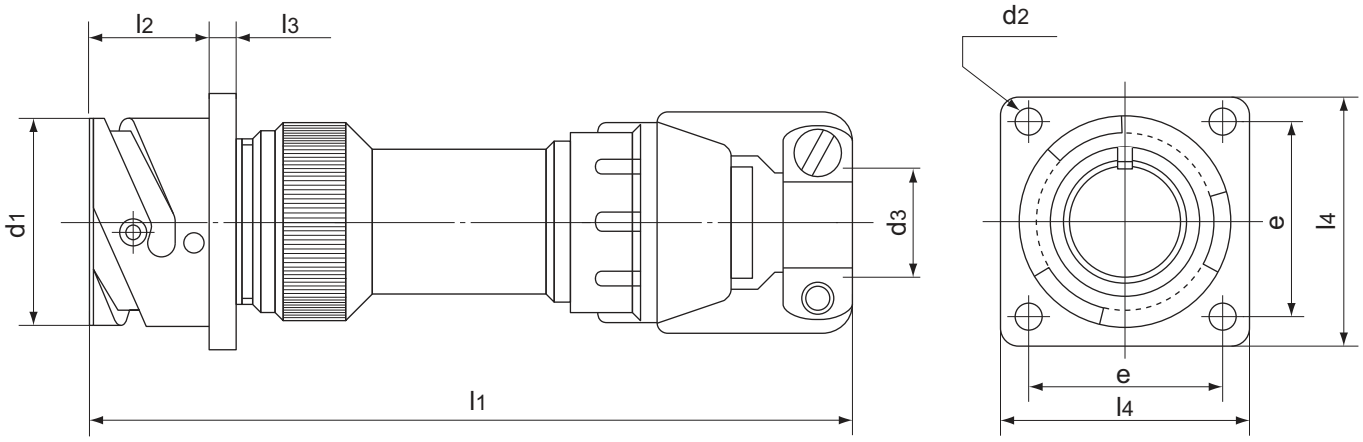



| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ ±0,1 | $d_4$ — | $d_5$ ±0,1 | $d_6$ ±0,1 | $d_7$ max. | e ±0,1 | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 13,0 | 15,5 | 17,0 | 8,6 | 22 | 18,2 | 49,8 | 14,2 | 2,8 | 25,4 | 11,7 | 3,5 |
| | .72 | .126 | .52 | .610 | .669 | .339 | 0.89 | .717 | 1.96 | .559 | .110 | 1.00 | .461 | .138 |
| 14S | 24,6 | 3,2 | 16,8 | 19,1 | 20,1 | 11,2 | 25 | 23.0 | 49,8 | 14,2 | 3,2 | 30,0 | 11,7 | 3,5 |
| | .97 | .126 | .66 | .752 | .791 | .441 | 0.98 | .906 | 1.96 | .559 | .126 | 1.181 | .461 | .138 |
| 16S | 27,4 | 3,2 | 21,7 | 23,9 | 23,5 | 14 | 28 | 24,6 | 50,6 | 14,2 | 3,2 | 32,5 | 11,7 | 3,5 |
| | 1.08 | .126 | .86 | .941 | .925 | .551 | 1.10 | .969 | 1.99 | .559 | .126 | 1.280 | .461 | .138 |
| 16 | 27,4 | 3,2 | 21,7 | 23,9 | 23,5 | 14 | 28 | 24,6 | 60,1 | 19,0 | 3,2 | 32,5 | 11,5 | 3,5 |
| | 1.08 | .126 | .86 | .941 | .925 | .551 | 1.10 | .969 | 2.37 | .748 | .126 | 1.280 | .453 | .138 |
| 18 | 30,8 | 3,2 | 21,7 | 23,9 | 26,5 | 16,4 | 31 | 27,0 | 59,6 | 19,0 | 4,0 | 35,0 | 11,5 | 3,5 |
| | 1.21 | .126 | .86 | .941 | 1.043 | .646 | 1.22 | 1.063 | 2.35 | .748 | .157 | 1.378 | .453 | .138 |
| 20 | 34,2 | 3,2 | 26,1 | 29,6 | 30,2 | 19,3 | 35 | 29,4 | 60,3 | 19,0 | 4,0 | 38,0 | 12,4 | 3,5 |
| | 1.35 | .126 | 1.03 | 1.165 | 1.189 | .760 | 1.38 | 1.157 | 2.37 | .748 | .157 | 1.496 | .488 | .138 |
| 22 | 37,4 | 3,2 | 26,1 | 29,6 | 33,6 | 22 | 38 | 31,8 | 60,3 | 19,0 | 4,0 | 41,0 | 12,4 | 3,5 |
| | 1.47 | .126 | 1.03 | 1.165 | 1.323 | .866 | 1.50 | 1.252 | 2.37 | .748 | .157 | 1.614 | .488 | .138 |
| 24 | 40,9 | 3,7 | 34,3 | 37,8 | 36,1 | 25 | 41 | 34,9 | 62,9 | 20,6 | 4,0 | 44,5 | 12,7 | 3,5 |
| | 1.61 | .146 | 1.35 | 1.488 | 1.421 | .984 | 1.61 | 1.374 | 2.48 | .811 | .157 | 1.752 | .500 | .138 |
| 28 | 46,7 | 3,7 | 34,3 | 37,8 | 41,4 | 28 | 48 | 39,7 | 64,7 | 20,6 | 4,0 | 50,8 | 12,7 | 3,5 |
| | 1.84 | .146 | 1.35 | 1.488 | 1.63 | 1.102 | 1.89 | 1.563 | 2.55 | .811 | .157 | 2.000 | .500 | .138 |
| 32 | 53,4 | 4,3 | 43,4 | 47,8 | 48,6 | 34,8 | 54 | 44,5 | 67 | 22,2 | 4,0 | 57,0 | 15,2 | 3,5 |
| | 2.10 | .169 | 1.71 | 1.882 | 1.913 | 1.370 | 2.12 | 1.752 | 2.64 | .874 | .157 | 2.244 | .598 | .138 |
| 36 | 59,6 | 4,3 | 43,4 | 47,8 | 54,8 | 38,7 | 61 | 49,2 | 67 | 22,2 | 4,0 | 63,5 | 15,2 | 3,5 |
| | 2.35 | .169 | 1.71 | 1.882 | 2.157 | 1.524 | 2.40 | 1.937 | 2.64 | .874 | .157 | 2.500 | .598 | .138 |
| 40 | 65,5 | 4,3 | 52,6 | 57,8 | 61,0 | 48,2 | 68 | 55,5 | 67,3 | 22,2 | 4,0 | 69,9 | 15,5 | 3,5 |
| | 2.58 | .169 | 2.07 | 2.276 | 2.402 | 1.898 | 2.68 | 2.185 | 2.65 | .874 | .157 | 2.752 | .610 | .138 |

* Nominal values after coupling the backshell

Dimensions are mm. over inches

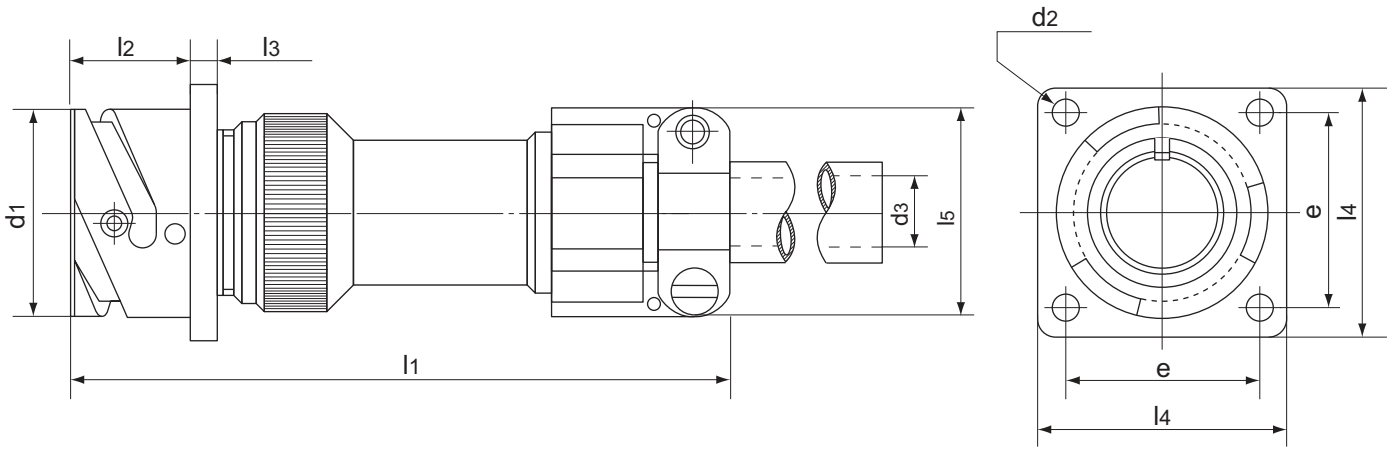
Receptacle with through mounting holes, long backshell and cable clamp for jacketed cables. LCFZ type also has an individual wire sealing grommet. For threaded and countersunk mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ open | $d_3$ closed | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 7,93 | 2,38 | 18,2 | 101 | 14,2 | 2,8 | 25,4 |
| | .72 | .126 | .312 | .094 | .717 | 3.98 | .559 | .110 | 1.00 |
| 14S | 24,6 | 3,2 | 11,12 | 6,35 | 23,0 | 101 | 14,2 | 3,2 | 30,0 |
| | .97 | .126 | .438 | .25 | .906 | 3.98 | .559 | .126 | 1.181 |
| 16S | 27,4 | 3,2 | 13,48 | 8 | 24,6 | 101 | 14,2 | 3,2 | 32,5 |
| | 1.08 | .126 | .531 | .315 | .969 | 3.98 | .559 | .126 | 1.280 |
| 16 | 27,4 | 3,2 | 13,48 | 8 | 24,6 | 114 | 19,0 | 3,2 | 32,5 |
| | 1.08 | .126 | .531 | .315 | .969 | 4.49 | .748 | .126 | 1.280 |
| 18 | 30,8 | 3,2 | 15,87 | 9,6 | 27,0 | 119 | 19,0 | 4,0 | 35,0 |
| | 1.21 | .126 | .625 | .375 | 1.063 | 4.68 | .748 | .157 | 1.378 |
| 20 | 34,2 | 3,2 | 19,0 | 11,3 | 29,4 | 119 | 19,0 | 4,0 | 38,0 |
| | 1.35 | .126 | .748 | .445 | 1.157 | 4.68 | .748 | .157 | 1.496 |
| 22 | 37,4 | 3,2 | 19,0 | 11,3 | 31,8 | 119 | 19,0 | 4,0 | 41,0 |
| | 1.47 | .126 | .748 | .445 | 1.252 | 4.68 | .748 | .157 | 1.614 |
| 24 | 40,9 | 3,7 | 23,8 | 15,5 | 34,9 | 124 | 20,6 | 4,0 | 44,5 |
| | 1.61 | .146 | .938 | .610 | 1.374 | 4.88 | .811 | .157 | 1.752 |
| 28 | 46,7 | 3,7 | 23,8 | 15,5 | 39,7 | 130 | 20,6 | 4,0 | 50,8 |
| | 1.84 | .146 | .938 | .610 | 1.563 | 5.12 | .811 | .157 | 2.000 |
| 32 | 53,4 | 4,3 | 31,75 | 23,4 | 44,5 | 137 | 22,2 | 4,0 | 57,0 |
| | 2.10 | .169 | 1.250 | .921 | 1.752 | 5.39 | .874 | .157 | 2.244 |
| 36 | 59,6 | 4,3 | 35,0 | 23,4 | 49,2 | 144 | 22,2 | 4,0 | 63,5 |
| | 2.35 | .169 | 1.378 | .921 | 1.937 | 5.67 | .874 | .157 | 2.500 |
| 40 | 65,5 | 4,3 | 41,25 | 29,9 | 55,5 | 144 | 22,2 | 4,0 | 69,9 |
| | 2.58 | .169 | 1.625 | 1.177 | 2.185 | 5.67 | .874 | .157 | 2.752 |

Dimensions are mm. over inches

Receptacle with through mounting holes, long backshell and cable clamp with bushing. LF type also has an individual sealing grommet. For threaded and countersunk mounting holes, see page 197.

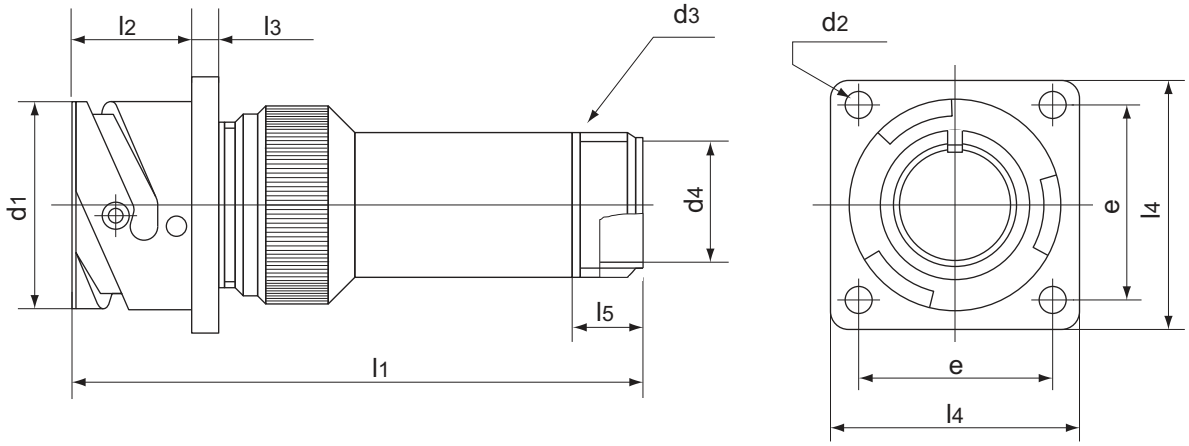



| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ * max | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ max. |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 5,6 | 18,2 | 92 | 14,2 | 2,8 | 25,4 | 22,7 |
| | .72 | .126 | .22 | .717 | 3.62 | .559 | .110 | 1.00 | .89 |
| 14S | 24,6 | 3,2 | 7,9 | 23,0 | 93 | 14,2 | 3,2 | 30,0 | 27,5 |
| | .97 | .126 | .31 | .906 | 3.66 | .559 | .126 | 1.181 | 1.08 |
| 16S | 27,4 | 3,2 | 11,0 | 24,6 | 95 | 14,2 | 3,2 | 32,5 | 30,0 |
| | 1,08 | .126 | .44 | .969 | 3.74 | .559 | .126 | 1.280 | 1.18 |
| 16 | 27,4 | 3,2 | 11,0 | 24,6 | 111 | 19,0 | 3,2 | 32,5 | 30,0 |
| | 1.08 | .126 | .44 | .969 | 4.37 | .748 | .126 | 1.280 | 1.18 |
| 18 | 30,8 | 3,2 | 14,2 | 27,0 | 111 | 19,0 | 4,0 | 35,0 | 32,2 |
| | 1.21 | .126 | .56 | 1.063 | 4.37 | .748 | .157 | 1.378 | 1.27 |
| 20 | 34,2 | 3,2 | 15,8 | 29,4 | 111 | 19,0 | 4,0 | 38,0 | 37,5 |
| | 1.35 | .126 | .63 | 1.157 | 4.37 | .748 | .157 | 1.496 | 1.48 |
| 22 | 37,4 | 3,2 | 15,8 | 31,8 | 111 | 19,0 | 4,0 | 41,0 | 37,5 |
| | 1.47 | .126 | .63 | 1.252 | 4.37 | .748 | .157 | 1.614 | 1.48 |
| 24 | 40,9 | 3,7 | 19,0 | 34,9 | 113 | 20,6 | 4,0 | 44,5 | 43,3 |
| | 1.61 | .146 | .75 | 1.374 | 4.45 | .811 | .157 | 1.752 | 1.71 |
| 28 | 46,7 | 3,7 | 19,0 | 39,7 | 121 | 20,6 | 4,0 | 50,8 | 43,3 |
| | 1.84 | .146 | .75 | 1.563 | 4.76 | .811 | .157 | 2.000 | 1.71 |
| 32 | 53,4 | 4,3 | 23,8 | 44,5 | 123 | 22,2 | 4,0 | 57,0 | 51,7 |
| | 2.10 | .169 | .94 | 1.752 | 4.84 | .874 | .157 | 2.244 | 2.04 |
| 36 | 59,6 | 4,3 | 31,7 | 49,2 | 125 | 22,2 | 4,0 | 63,5 | 58,0 |
| | 2.35 | .169 | 1.25 | 1.937 | 4.92 | .874 | .157 | 2.500 | 2.28 |
| 40 | 65,5 | 4,3 | 34,9 | 55,5 | 138 | 22,2 | 4,0 | 69,9 | 68,5 |
| | 2.58 | .169 | 1.38 | 2.185 | 5.43 | .874 | .157 | 2.752 | 1.69 |

* Max. permissible outside diameter of cable

Dimensions are mm. over inches

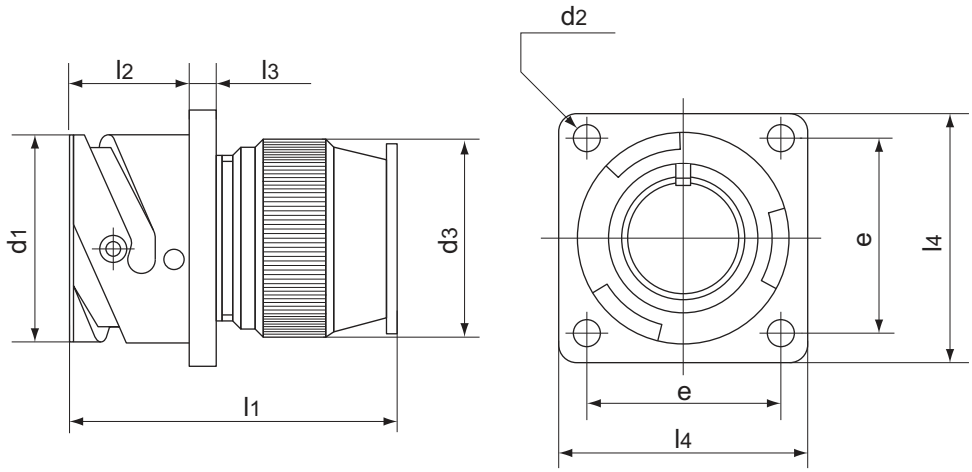
Receptacle with through mounting holes, and long backshell. RL Type has an individual wire sealing grommet. For threaded and countersunk mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ Thread in inches | $d_4$ +0,1 -0 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 5/8-24 UNEF-2A | 8,5 | 18,2 | 71 | 14,2 | 2,8 | 25,4 | 9,5 |
| | 0.72 | .126 | | .33 | .717 | 2.79 | .559 | .110 | 1.00 | .37 |
| 14S | 24,6 | 3,2 | 3/4-20 UNEF-2A | 11,7 | 23,0 | 71 | 14,2 | 3,2 | 30,0 | 9,5 |
| | 0.97 | .126 | | .46 | .906 | 2.79 | .559 | .126 | 1.181 | .37 |
| 16S | 27,4 | 3,2 | 7/8-20 UNEF-2A | 13,9 | 24,6 | 71 | 14,2 | 3,2 | 32,5 | 9,5 |
| | 1.08 | .126 | | .55 | .969 | 2.79 | .559 | .126 | 1.280 | .37 |
| 16 | 27,4 | 3,2 | 7/8-20 UNEF-2A | 13,9 | 24,6 | 87 | 19,0 | 3,2 | 32,5 | 9,5 |
| | 1.08 | .126 | | .55 | .969 | 3.42 | .748 | .126 | 1.280 | .37 |
| 18 | 30,8 | 3,2 | 1”-20 UNEF-2A | 16,9 | 27,0 | 87 | 19,0 | 4,0 | 35,0 | 9,5 |
| | 1.21 | .126 | | .67 | 1.063 | 3.42 | .748 | .157 | 1.378 | .37 |
| 20 | 34,2 | 3,2 | 1”3/16-18 UNEF-2A | 20,9 | 29,4 | 87 | 19,0 | 4,0 | 38,0 | 9,5 |
| | 1.35 | .126 | | .83 | 1.157 | 3.42 | .748 | .157 | 1.496 | .37 |
| 22 | 37,4 | 3,2 | 1”3/16-18 UNEF-2A | 20,9 | 31,8 | 87 | 19,0 | 4,0 | 41,0 | 9,5 |
| | 1.47 | .126 | | .83 | 1.252 | 3.42 | .748 | .157 | 1.614 | .37 |
| 24 | 40,9 | 3,7 | 1”7/16-18 UNEF-2A | 25,9 | 34,9 | 87 | 20,6 | 4,0 | 44,5 | 9,5 |
| | 1.61 | 0.146 | | 1.02 | 1.374 | 3.42 | .811 | .157 | 1.752 | .37 |
| 28 | 46,7 | 3,7 | 1”7/16-18 UNEF-2A | 26,0 | 39,7 | 95 | 20,6 | 4,0 | 50,8 | 9,5 |
| | 1.84 | 0.146 | | 1.02 | 1.563 | 3.74 | .811 | .157 | 2.000 | .37 |
| 32 | 53,4 | 4,3 | 1”3/4-18 UNS-2A | 32,0 | 44,5 | 95 | 22,2 | 4,0 | 57,0 | 11,0 |
| | 2.10 | 0.169 | | 1.26 | 1.752 | 3.74 | .874 | .157 | 2.244 | .43 |
| 36 | 59,6 | 4,3 | 2”-18 UNS-2A | 36,9 | 49,2 | 95 | 22,2 | 4,0 | 63,5 | 11,8 |
| | 2.35 | 0.169 | | 1.46 | 1.937 | 3.74 | .874 | .157 | 2.500 | .47 |
| 40 | 65,5 | 4,3 | 2”1/4-16 UN-2A | 44,9 | 55,5 | 95 | 22,2 | 4,0 | 69,9 | 11,8 |
| | 2.58 | 0.169 | | 1.77 | 2.185 | 3.74 | .874 | .157 | 2.752 | .47 |

Dimensions are mm. over inches

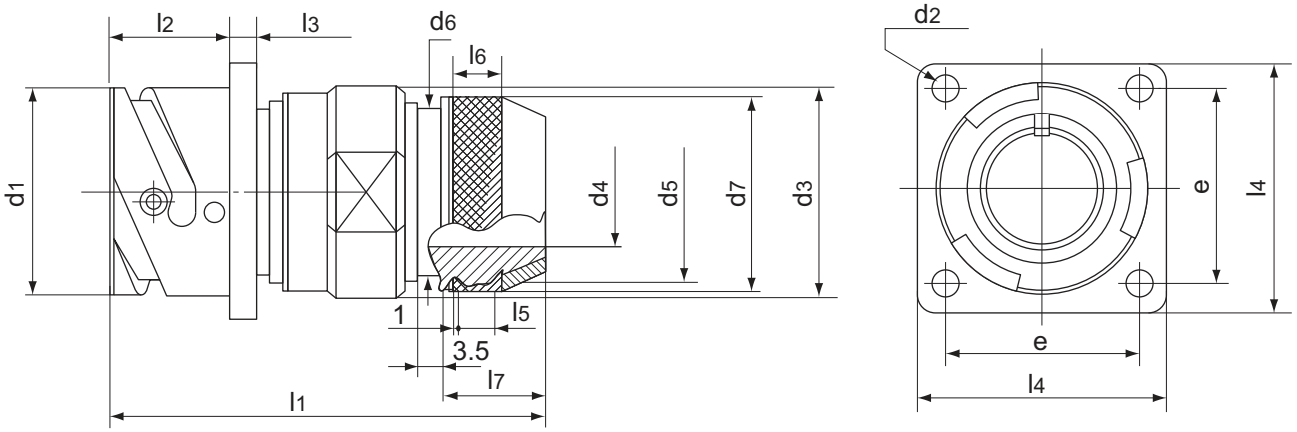
Receptacle with through mounting holes and an individual wire sealing grommet. For threaded and countersunk mounting holes, see page 197. ARV type has no wire sealing grommet.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 20,0 | 18,2 | 40 | 14,2 | 2,8 | 25,4 |
| | 0.72 | .126 | .79 | .717 | 1.57 | .559 | .110 | 1.00 |
| 14S | 24,6 | 3,2 | 24,0 | 23,0 | 40 | 14,2 | 3,2 | 30,0 |
| | 0.97 | .126 | .95 | 906 | 1.57 | .559 | .126 | 1.181 |
| 16S | 27,4 | 3,2 | 26,0 | 24,6 | 40 | 14,2 | 3,2 | 32,5 |
| | 1.08 | .126 | 1.02 | .969 | 1.57 | .559 | .126 | 1.280 |
| 16 | 27,4 | 3,2 | 26,0 | 24,6 | 56 | 19,0 | 3,2 | 32,5 |
| | 1.08 | .126 | 1.02 | .969 | 2.20 | .748 | .126 | 1.280 |
| 18 | 30,8 | 3,2 | 29,5 | 27,0 | 56 | 19,0 | 4,0 | 35,0 |
| | 1.21 | .126 | 1.16 | 1.063 | 2.20 | .748 | .157 | 1.378 |
| 20 | 34,2 | 3,2 | 33,0 | 29,4 | 57 | 19,0 | 4,0 | 38,0 |
| | 1.35 | .126 | 1.30 | 1.157 | 2.24 | .748 | .157 | 1.496 |
| 22 | 37,4 | 3,2 | 36,0 | 31,8 | 57 | 19,0 | 4,0 | 41,0 |
| | 1.47 | .126 | 1.42 | 1.252 | 2.24 | .748 | .157 | 1.614 |
| 24 | 40,9 | 3,7 | 40,0 | 34,9 | 59 | 20,6 | 4,0 | 44,5 |
| | 1.61 | .146 | 1.58 | 1.374 | 2.32 | .811 | .157 | 1.752 |
| 28 | 46,7 | 3,7 | 46,0 | 39,7 | 59 | 20,6 | 4,0 | 50,8 |
| | 1.84 | .146 | 1.81 | 1.563 | 2.32 | .811 | .157 | 2.000 |
| 32 | 53,4 | 4,3 | 51,5 | 44,5 | 60 | 22,2 | 4,0 | 57,0 |
| | 2.10 | .169 | 2.03 | 1.752 | 2.36 | .874 | .157 | 2.244 |
| 36 | 59,6 | 4,3 | 58,0 | 49,2 | 60 | 22,2 | 4,0 | 63,5 |
| | 2.35 | .169 | 2.28 | 1.937 | 2.36 | .874 | .157 | 2.500 |
| 40 | 65,5 | 4,3 | 64,5 | 55,5 | 61 | 22,2 | 4,0 | 69,9 |
| | 2.58 | .169 | 2.54 | 2.185 | 2.40 | .874 | .157 | 2.752 |

Dimensions are mm. over inches

Receptacle with through mounting holes, individual wire sealing grommet, special backshell for shield braid termination (for shielding characteristics, see page 12). To be used with heat shrinkable tubing. For threaded and countersunk mounting holes, see page 197. ASB type has no wire sealing grommet.

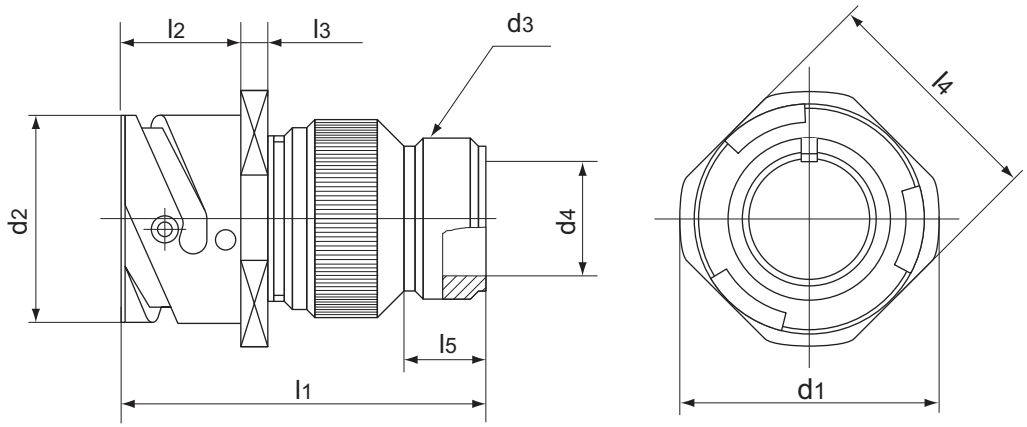



| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ max. | $d_4$ min. | $d_5$ Thread | $d_6$ max. | $d_7$ +0,5 -0 | e ±0,1 | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. | $l_6$ ±0,5 | $l_7$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 22,0 | 8,6 | M16x1 | 16,3 | 18,5 | 18,2 | 52,2 | 14,2 | 2,8 | 25,4 | 4,5 | 5,5 | 17,0 |
| | 0.72 | 0.126 | .87 | .34 | | .64 | .73 | .717 | 2.06 | .559 | .110 | 1.00 | 0.17 | 0.22 | .669 |
| 14S | 24,6 | 3,2 | 25,0 | 10,6 | M20x1 | 20,0 | 22,0 | 23,0 | 52,2 | 14,2 | 3,2 | 30,0 | 5 | 7 | 17,0 |
| | 0.97 | 0.126 | .98 | .42 | | .79 | .87 | .906 | 2.06 | .559 | .126 | 1.181 | .20 | 0.27 | .669 |
| 16S | 27,4 | 3,2 | 28,0 | 13,5 | M23x1 | 23,0 | 25,0 | 24,6 | 54,2 | 14,2 | 3,2 | 32,5 | 6 | 8 | 18,5 |
| | 1.08 | 0.126 | 1.10 | .53 | | .90 | .98 | .969 | 2.13 | .559 | .126 | 1.280 | 0.24 | 0.31 | .728 |
| 16 | 27,4 | 3,2 | 28,0 | 13,5 | M23x1 | 23,0 | 25,0 | 24,6 | 63,3 | 19,0 | 3,2 | 32,5 | 6 | 8 | 18,5 |
| | 1.08 | 0.126 | 1.10 | .53 | | .90 | .98 | .969 | 2.49 | .748 | .126 | 1.280 | 0.24 | 0.31 | .728 |
| 18 | 30,8 | 3,2 | 31,0 | 14,6 | M26x1 | 24,5 | 28,0 | 27,0 | 64,5 | 19,0 | 4,0 | 35,0 | 6 | 8 | 18,5 |
| | 1.21 | 0.126 | 1.22 | .58 | | .97 | 1.10 | 1.063 | 2.54 | .748 | 0.16 | 1.378 | 0.24 | 0.31 | .728 |
| 20 | 34,2 | 3,2 | 35,0 | 18,5 | M30x1 | 28,5 | 32,0 | 29,4 | 64,5 | 19,0 | 4,0 | 38,0 | 6 | 10 | 18,5 |
| | 1.35 | 0.126 | 1.38 | .73 | | 1.12 | 1.26 | 1.157 | 2.54 | .748 | .157 | 1.496 | 0.24 | 0.39 | .728 |
| 22 | 37,4 | 3,2 | 38,0 | 20,8 | M32x1 | 30,5 | 34,0 | 31,8 | 64.5 | 19,0 | 4,0 | 41,0 | 6 | 10 | 18,5 |
| | 1.47 | 0.126 | 1.50 | .82 | | 1.20 | 1.34 | 1.252 | 2.54 | .748 | .157 | 1.614 | 0.24 | 0.39 | .728 |
| 24 | 40,9 | 3,7 | 41,0 | 24,6 | M36x1 | 34,5 | 38,0 | 34,9 | 65,2 | 20,6 | 4,0 | 44,5 | 6 | 10 | 18,5 |
| | 1.61 | 0.146 | 1.61 | .97 | | 1.36 | 1.50 | 1.374 | 2.57 | .811 | .157 | 1.752 | 0.24 | 0.39 | .728 |
| 28 | 46,7 | 3,7 | 48,0 | 27,0 | M39x1 | 37,5 | 41,0 | 39,7 | 65,2 | 20,6 | 4,0 | 50,8 | 6 | 10 | 18,5 |
| | 1.84 | 0.146 | 1.89 | 1.06 | | 1.48 | 1.61 | 1.563 | 2.57 | .811 | .157 | 2.000 | 0.24 | 0.39 | .728 |
| 32 | 53,4 | 4,3 | 54,0 | 33,3 | M45x1 | 44,0 | 48,0 | 44,5 | 66,8 | 22,2 | 4,0 | 57,0 | 6 | 10 | 18,5 |
| | 2.10 | 0.169 | 2.13 | 1.31 | | 1.73 | 1.89 | 1.752 | 2.63 | .874 | .157 | 2.244 | 0.24 | 0.39 | .728 |
| 36 | 59,6 | 4,3 | 61,0 | 38,5 | M52x1 | 51,0 | 55,0 | 49,2 | 66,8 | 22,2 | 4,0 | 63,5 | 6 | 10 | 18,5 |
| | 2.35 | 0.169 | 2.40 | 1.52 | | 2.01 | 2.17 | 1.937 | 2.63 | .874 | .157 | 2.500 | 0.24 | 0.39 | .728 |
| 40 | 65,5 | 4,3 | 68,0 | 46,0 | M59x1 | 58,0 | 62,0 | 55,5 | 66,8 | 22,2 | 4,0 | 69,9 | 6 | 10 | 18,5 |
| | 2.58 | 0.169 | 2.68 | 1.81 | | 2.28 | 2.44 | 2.185 | 2.63 | .874 | .157 | 2.752 | 0.24 | 0.39 | .728 |

* Nominal dimension with tightend backshell

Dimensions are mm. over inches

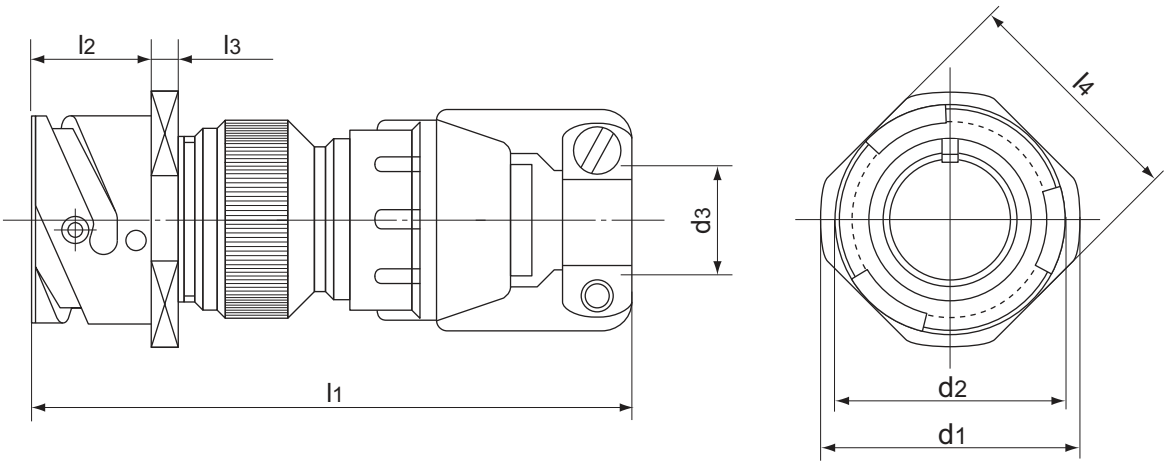
Inline receptacle with backshell. R type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ Thread in inches | $d_4$ +0,1 -0 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ min. |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 5/8-24 UNEF-2A | 10,4 | 43 | 14,2 | 2,8 | 20,6 | 9,5 |
| | .992 | .72 | | .41 | 1.69 | .559 | .110 | .811 | .37 |
| 14S | 29,8 | 24,6 | 3/4-20 UNEF-2A | 13,2 | 47 | 14,2 | 3,2 | 25,4 | 9,5 |
| | 1.173 | .97 | | .52 | 1.85 | .559 | .126 | 1.00 | .37 |
| 16S | 32,3 | 27,4 | 7/8-20 UNEF-2A | 16,2 | 47 | 14,2 | 3,2 | 28,6 | 9,5 |
| | 1.272 | 1.08 | | .64 | 1.85 | .559 | .126 | 1.126 | .37 |
| 16 | 32,3 | 27,4 | 7/8-20 UNEF-2A | 16,2 | 58 | 19,0 | 3,2 | 28,6 | 9,5 |
| | 1.272 | 1.08 | | .64 | 2.28 | .748 | .126 | 1.126 | .37 |
| 18 | 34,8 | 30,8 | 1"-20 UNEF-2A | 19,2 | 58 | 19,0 | 4,0 | 31,7 | 9,5 |
| | 1.370 | 1.21 | | .76 | 2.28 | .748 | .157 | 1.248 | .37 |
| 20 | 37,8 | 34,2 | 1"3/16-18 UNEF-2A | 22,0 | 58 | 19,0 | 4,0 | 34,9 | 9,5 |
| | 1.488 | 1.35 | | .87 | 2.28 | .748 | .157 | 1.374 | .37 |
| 22 | 41,1 | 37,4 | 1"3/16-18 UNEF-2A | 24,5 | 59 | 19,0 | 4,0 | 38,1 | 9,5 |
| | 1.618 | 1.47 | | .97 | 2.32 | .748 | .157 | 1.500 | .37 |
| 24 | 44,6 | 40,9 | 1"7/16-18 UNEF-2A | 27,8 | 61 | 20,6 | 4,0 | 41,3 | 9,5 |
| | 1.756 | 1.61 | | 1.09 | 2.40 | .811 | .157 | 1.626 | .37 |
| 28 | 50,9 | 46,7 | 1"7/16-18 UNEF-2A | 31,2 | 67 | 20,6 | 4,0 | 47,6 | 9,5 |
| | 2.004 | 1.84 | | 1.23 | 2.64 | .811 | .157 | 1.874 | .37 |
| 32 | 57,1 | 53,4 | 1"3/4-18 UNS-2A | 37,8 | 71 | 22,2 | 4,0 | 54,0 | 11,0 |
| | 2.248 | 2.10 | | 1.49 | 2.79 | .874 | .157 | 2.126 | .43 |
| 36 | 63,6 | 59,6 | 2"-18 UNS-2A | 45.0 | 71 | 22,2 | 4,0 | 60,6 | 11,8 |
| | 2.504 | 2.35 | | 1.77 | 2.79 | .874 | .157 | 2.386 | .47 |
| 40 | 70.0 | 65,5 | 2"1/4-16 UN-2A | 51,2 | 86 | 22,2 | 4,0 | 66,5 | 11,8 |
| | 2.756 | 2.58 | | 2.02 | 3.38 | .874 | .157 | 2.618 | .47 |

Dimensions are mm. over inches

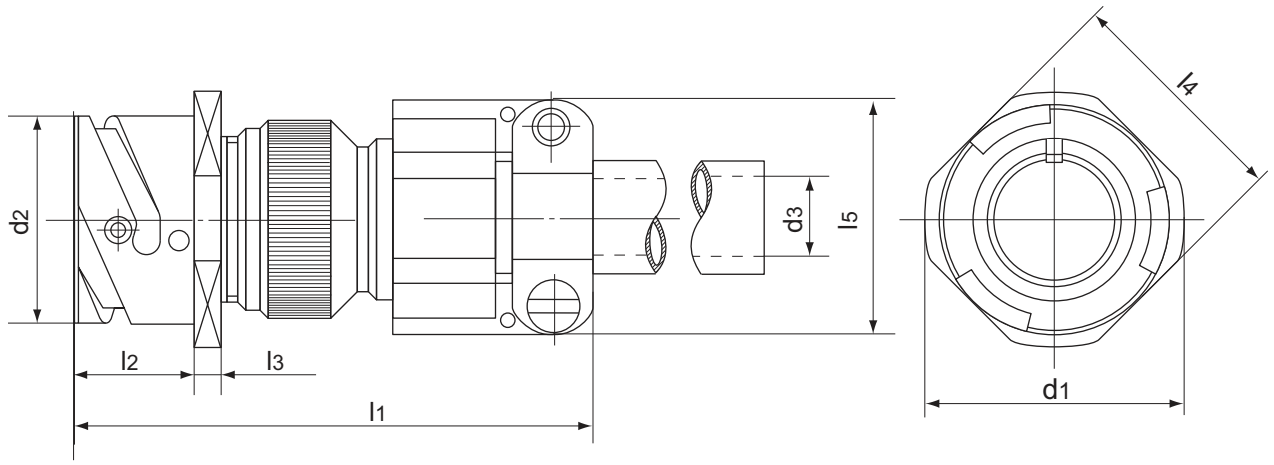
Inline receptacle with a cable clamp for jacketed cable. CFZ type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ open | $d_3$ closed | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 7,93 | 2,38 | 73 | 14,2 | 2,8 | 20,6 |
| | .992 | .72 | .312 | .094 | 2.87 | .559 | .110 | .811 |
| 14S | 29,8 | 24,6 | 11,12 | 6,35 | 77 | 14,2 | 3,2 | 25,4 |
| | 1.173 | .97 | .438 | .25 | 0.30 | .559 | .126 | 1.00 |
| 16S | 32,3 | 27,4 | 13,48 | 8 | 77 | 14,2 | 3,2 | 28,6 |
| | 1.272 | 1.08 | .531 | .315 | 0.30 | .559 | .126 | 1.126 |
| 16 | 32,3 | 27,4 | 13,48 | 8 | 88 | 19,0 | 3,2 | 28,6 |
| | 1.272 | 1.08 | .531 | .315 | 3.49 | .748 | .126 | 1.126 |
| 18 | 34,8 | 30,8 | 15,87 | 9,6 | 91 | 19,0 | 4,0 | 31,7 |
| | 1.370 | 1.21 | .625 | .375 | 3.58 | .748 | .157 | 1.248 |
| 20 | 37,8 | 34,2 | 19,0 | 11,3 | 91 | 19,0 | 4,0 | 34,9 |
| | 1.488 | 1.35 | .748 | .445 | 3.58 | .748 | .157 | 1.374 |
| 22 | 41,1 | 37,4 | 19,0 | 11,3 | 92 | 19,0 | 4,0 | 38,1 |
| | 1.618 | 1.47 | .748 | .445 | 3.62 | .748 | .157 | 1.500 |
| 24 | 44,6 | 40,9 | 23,8 | 15,5 | 97 | 20,6 | 4,0 | 41,3 |
| | 1.756 | 1.61 | .938 | .610 | 3.82 | .811 | .157 | 1.626 |
| 28 | 50,9 | 46,7 | 23,8 | 15,5 | 103 | 20,6 | 4,0 | 47,6 |
| | 2.004 | 1.84 | .938 | .610 | 4.05 | .811 | .157 | 1.874 |
| 32 | 57,1 | 53,4 | 31,75 | 23,4 | 113 | 22,2 | 4,0 | 54.0 |
| | 2.248 | 2.10 | 1.250 | .921 | 4.45 | .874 | .157 | 2.126 |
| 36 | 63,6 | 59,6 | 35,0 | 23,4 | 120 | 22,2 | 4,0 | 60,6 |
| | 2.504 | 2.35 | 1.378 | .921 | 4.72 | .874 | .157 | 2.386 |
| 40 | 70,0 | 65,5 | 41,25 | 29,9 | 135 | 22,2 | 4,0 | 66,5 |
| | 2.756 | 2.58 | 1.625 | 1.177 | 5.31 | .874 | .157 | 2.618 |

Dimensions are mm. over inches

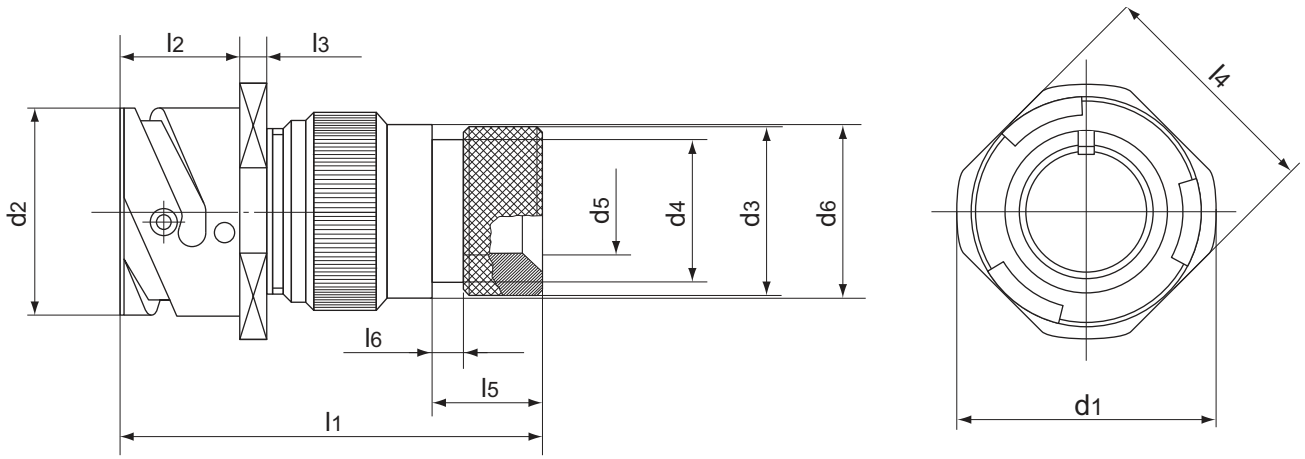
Inline receptacle with an individual wire sealing grommet and cable clamp with a bushing. AF type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ * max | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ max. |
|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 5,6 | 64 | 14,2 | 2,8 | 20,6 | 22,7 |
| | .992 | 0.72 | .22 | 2.52 | .559 | .110 | .811 | .89 |
| 14S | 29,8 | 24,6 | 7,9 | 69 | 14,2 | 3,2 | 25,4 | 27,5 |
| | 1.173 | 0.97 | .31 | 2.72 | .559 | .126 | 1.00 | 1.08 |
| 16S | 32,3 | 27,4 | 11,0 | 71 | 14,2 | 3,2 | 28,6 | 30.0 |
| | 1.272 | 1.08 | .44 | 2.80 | .559 | .126 | 1.126 | 1.18 |
| 16 | 32,3 | 27,4 | 11.0 | 82 | 19,0 | 3,2 | 28,6 | 30.0 |
| | 1.272 | 1.08 | .44 | 3.23 | .748 | .126 | 1.126 | 1.18 |
| 18 | 34,8 | 30,8 | 14,2 | 82 | 19,0 | 4,0 | 31,7 | 32,2 |
| | 1.370 | 1.21 | .56 | 3.23 | .748 | .157 | 1.248 | 1.27 |
| 20 | 37,8 | 34,2 | 15,8 | 82 | 19,0 | 4,0 | 34,9 | 37,5 |
| | 1.488 | 1.35 | .63 | 3.23 | .748 | .157 | 1.374 | 1.48 |
| 22 | 41,1 | 37,4 | 15,8 | 83 | 19,0 | 4,0 | 38,1 | 37,5 |
| | 1.618 | 1.47 | .63 | 3.27 | .748 | .157 | 1.500 | 1.48 |
| 24 | 44,6 | 40,9 | 19,0 | 87 | 20,6 | 4,0 | 41,3 | 43,3 |
| | 1.756 | 1.61 | .75 | 3.42 | .811 | .157 | 1.626 | 1.71 |
| 28 | 50,9 | 46,7 | 19,0 | 93 | 20,6 | 4,0 | 47,6 | 43,3 |
| | 2.004 | 1.84 | .75 | 3.66 | .811 | .157 | 1.874 | 1.71 |
| 32 | 57,1 | 53,4 | 23,8 | 99 | 22,2 | 4,0 | 54,0 | 51,7 |
| | 2.248 | 2.10 | .94 | 3.90 | .874 | .157 | 2.126 | 2.04 |
| 36 | 63,6 | 59,6 | 31,7 | 100 | 22,2 | 4,0 | 60,6 | 58,0 |
| | 2.504 | 2.35 | 1.25 | 3.94 | .874 | .157 | 2.386 | 2.28 |
| 40 | 70,0 | 65,5 | 34,9 | 128 | 22,2 | 4,0 | 66,5 | 68,5 |
| | 2.756 | 2.58 | 1.38 | 5.04 | .874 | .157 | 2.618 | 2.69 |

* Max. permissible outside diameter of cable
Dimensions are mm. over inches

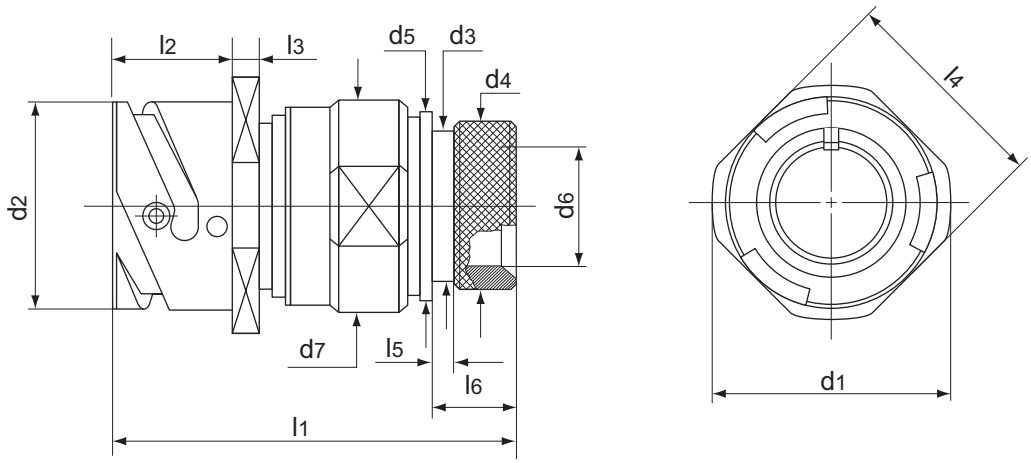
Inline receptacle with an individual wire sealing grommet and backshell for heat shrinkable tubing. AG type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ ±0,2 | $d_4$ max. | $d_5$ ±0,1 | $d_6$ ±0,2 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 15,5 | 13,3 | 7,9 | 17.0 | 48 | 14,2 | 2,8 | 20,6 | 11,7 | 3,5 |
| | .992 | .72 | .610 | .52 | 0.31 | .669 | 1.89 | .559 | .110 | .811 | .461 | .138 |
| 14S | 29,8 | 24,6 | 19,1 | 17,0 | 10,8 | 20,1 | 48 | 14,2 | 3,2 | 25,4 | 11,7 | 3,5 |
| | 1.173 | .97 | .752 | .66 | 0.42 | .791 | 1.89 | .559 | .126 | 1.00 | .461 | .138 |
| 16S | 32,3 | 27,4 | 23,9 | 21,9 | 13,7 | 23,5 | 48 | 14,2 | 3,2 | 28,6 | 11,7 | 3,5 |
| | 1.272 | 1.08 | .941 | .86 | 0.54 | .925 | 1.89 | .559 | .126 | 1.126 | .461 | .138 |
| 16 | 32,3 | 27,4 | 23,9 | 21,9 | 13,7 | 23,5 | 60 | 19,0 | 3,2 | 28,6 | 11,5 | 3,5 |
| | 1.272 | 1.08 | .941 | .86 | 0.54 | .925 | 2.36 | 0.75 | .126 | 1.126 | .453 | .138 |
| 18 | 34,8 | 30,8 | 23,9 | 21,9 | 14,8 | 26,5 | 60 | 19,0 | 4,0 | 31,7 | 11,5 | 3,5 |
| | 1.370 | 1.21 | .941 | .86 | 0.58 | 1.043 | 2.36 | .748 | .157 | 1.248 | .453 | .138 |
| 20 | 37,8 | 34,2 | 29,6 | 26,2 | 18,9 | 30,2 | 65 | 19,0 | 4,0 | 34,9 | 12,4 | 3,5 |
| | 1.488 | 1.35 | 1.165 | 1.03 | 0.74 | 1.189 | 2.56 | .748 | .157 | 1.374 | .488 | .138 |
| 22 | 41,1 | 37,4 | 29,6 | 26,2 | 21 | 33,6 | 65 | 19,0 | 4,0 | 38,1 | 12,4 | 3,5 |
| | 1.618 | 1.47 | 1.165 | 1.03 | 0.83 | 1.323 | 2.56 | .748 | .157 | 1.500 | .488 | .138 |
| 24 | 44,6 | 40,9 | 37,8 | 34,5 | 24,8 | 36,1 | 65 | 20,6 | 4,0 | 41,3 | 12,7 | 3,5 |
| | 1.756 | 1.61 | 1.488 | 1.35 | 0.98 | 1.421 | 2.56 | .811 | .157 | 1.626 | .500 | .138 |
| 28 | 50,9 | 46,7 | 37,8 | 34,5 | 27,2 | 41,4 | 65 | 20,6 | 4,0 | 47,6 | 12,7 | 3,5 |
| | 2.004 | 1.84 | 1.488 | 1.35 | 1.07 | 1.63 | 2.56 | .811 | .157 | 1.874 | .500 | .138 |
| 32 | 57,1 | 53,4 | 47,8 | 43,6 | 33,5 | 48,6 | 70 | 22,2 | 4,0 | 54.0 | 15,2 | 3,5 |
| | 2.248 | 2.10 | 1.882 | 1.71 | 1.32 | 1.913 | 2.75 | .874 | .157 | 2.126 | .598 | .138 |
| 36 | 63,6 | 59,6 | 47,8 | 43,6 | 38,7 | 54,8 | 75 | 22,2 | 4,0 | 60,6 | 15,2 | 3,5 |
| | 2.504 | 2.35 | 1.882 | 1.71 | 1.52 | 2.157 | 2.95 | .874 | .157 | 2.386 | .598 | .138 |
| 40 | 70,0 | 65,5 | 57,8 | 52,6 | 48,2 | 60,9 | 77 | 22,2 | 4,0 | 66,5 | 15,2 | 3,5 |
| | 2.756 | 2.58 | 2.276 | 2.07 | 1.90 | 2.402 | 3.03 | .874 | .157 | 2.618 | .610 | .138 |

Dimensions are mm. over inches

Inline receptacle with an individual wire sealing grommet and a two piece swivel backshell for heat shrinkable tubing. AG2 type has no wire sealing grommet.

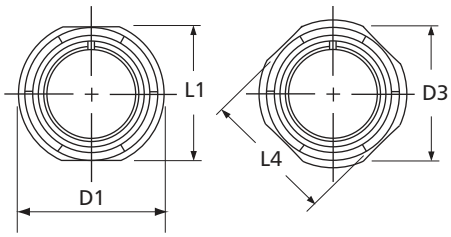


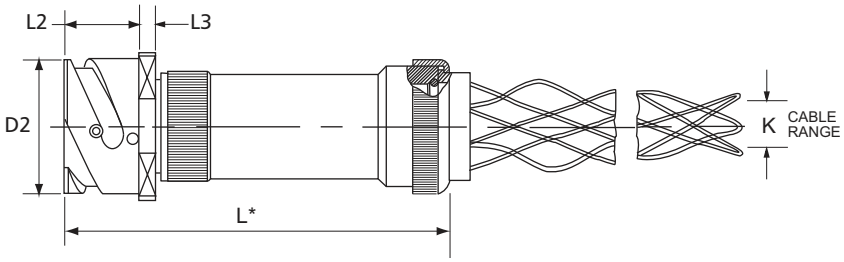

| Shell Size | $d_1$ max | $d_2$ +0 -0,15 | $d_3$ ±0,1 | $d_4$ — | $d_5$ ±0,1 | $d_6$ ±0,1 | $d_7$ max. | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 13 | 15,5 | 17.0 | 8,6 | 22 | 49,8 | 14,2 | 2,8 | 20,6 | 3,5 | 11,7 |
| | .992 | .72 | .52 | .610 | .669 | .339 | 0.87 | 1.96 | .559 | .110 | .811 | .138 | .461 |
| 14S | 29,8 | 24,6 | 16,8 | 19,1 | 20,1 | 11,2 | 25 | 49,8 | 14,2 | 3,2 | 25,4 | 3,5 | 11,7 |
| | 1.17 | .97 | .66 | .752 | .791 | .441 | 0.98 | 1.96 | .559 | .126 | 1.00 | .138 | .461 |
| 16S | 32,3 | 27,4 | 21,7 | 23,9 | 23,5 | 14 | 28 | 50,6 | 14,2 | 3,2 | 28,6 | 3,5 | 11,7 |
| | 1.27 | 1.08 | .86 | .941 | .925 | .551 | 1.10 | 1.99 | .559 | .126 | 1.126 | .138 | .461 |
| 16 | 32,3 | 27,4 | 21,7 | 23,9 | 23,5 | 14 | 28 | 60,1 | 19,0 | 3,2 | 28,6 | 3,5 | 11,5 |
| | 1.27 | 1.08 | .86 | .941 | .925 | .551 | 1.10 | 2.37 | .748 | .126 | 1.126 | .138 | .453 |
| 18 | 34,8 | 30,8 | 21,7 | 23,9 | 26,5 | 16,4 | 31 | 59,6 | 19,0 | 4,0 | 31,7 | 3,5 | 11,5 |
| | 1.37 | 1.21 | .86 | .941 | 1.043 | .646 | 1.22 | 2.35 | .748 | .157 | 1.248 | .138 | .453 |
| 20 | 37,8 | 34,2 | 26,1 | 29,6 | 30,2 | 19,3 | 35 | 60,3 | 19,0 | 4,0 | 34,9 | 3,5 | 12,4 |
| | 1.49 | 1.35 | 1.03 | 1.165 | 1.189 | .760 | 1.38 | 2.37 | .748 | .157 | 1.374 | .138 | .488 |
| 22 | 41,1 | 37,4 | 26,1 | 29,6 | 33,6 | 22 | 38 | 60,3 | 19,0 | 4,0 | 38,1 | 3,5 | 12,4 |
| | 1.62 | 1.47 | 1.03 | 1.165 | 1.323 | .866 | 1.50 | 2.37 | .748 | .157 | 1.500 | .138 | .488 |
| 24 | 44,6 | 40,9 | 34,3 | 37,8 | 36,1 | 25 | 41 | 62,9 | 20,6 | 4,0 | 41,3 | 3,5 | 12,7 |
| | 1.75 | 1.61 | 1.35 | 1.488 | 1.421 | .984 | 1.61 | 2.48 | .811 | .157 | 1.626 | .138 | .500 |
| 28 | 50,9 | 46,7 | 34,3 | 37,8 | 41,4 | 28 | 48 | 64,7 | 20,6 | 4,0 | 47,6 | 3,5 | 12,7 |
| | 2.0 | 1.84 | 1.35 | 1.488 | 1.630 | 1.102 | 1.89 | 2.55 | .811 | .157 | 1.874 | .138 | .500 |
| 32 | 57,1 | 53,4 | 43,4 | 47,8 | 48,6 | 34,8 | 54 | 67 | 22,2 | 4,0 | 54,0 | 3,5 | 15,2 |
| | 2.25 | 2.10 | 1.71 | 1.882 | 1.913 | 1.370 | 2.12 | 2.64 | .874 | .157 | 2.126 | .138 | .598 |
| 36 | 63,6 | 59,6 | 43,4 | 47,8 | 54,8 | 38,7 | 61 | 67 | 22,2 | 4,0 | 60,6 | 3,5 | 15,2 |
| | 2.50 | 2.35 | 1.71 | 1.882 | 2.157 | 1.524 | 2.40 | 2.64 | .874 | .157 | 2.386 | .138 | .598 |
| 40 | 70 | 65,5 | 52,6 | 57,8 | 61.0 | 48,2 | 68 | 67,3 | 22,2 | 4,0 | 66,5 | 3,5 | 15,5 |
| | 2.75 | 2.58 | 2.07 | 2.276 | 2.402 | 1.898 | 2.68 | 2.65 | .874 | .157 | 2.618 | .138 | .610 |

* Nominal dimension with tightened backshell

Dimensions are mm. over inches

Inline receptacle for terminating jacketed cable. Long LC backshell with internal adapter suitable for various sizes of cable, grommet, compression ring and a cord grip included. LCG same as LC but without the wire sealing grommet and compression ring.



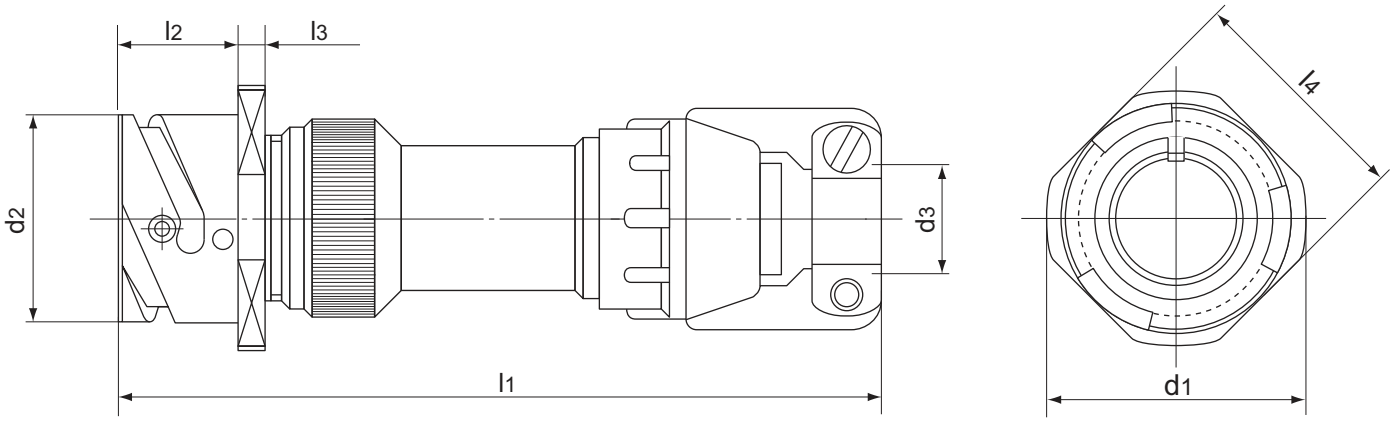

*Dimension "L" will vary from the value indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 | L Approx. |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 | 100 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 | 3.94 |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 | 100 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 | 3.94 |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 | 100 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 | 3.94 |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 | 110 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 | 4.33 |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 | 110 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 | 4.33 |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 | 116 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 | 4.57 |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 | 116 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 | 4.57 |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 | 120 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 | 4.72 |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 | 129 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 | 5.08 |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 | 145 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 | 5.71 |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 | 145 |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 | 5.71 |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 | 145 |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 | 5.71 |

| K Suffix in Connector Part Number | K Cable Range Min. | Max. |
|---|---|---|
| K0 | 6,35 | 9,53 |
| | .250 | .375 |
| K1 | 9,53 | 12,7 |
| | .375 | .500 |
| K2 | 12,7 | 15,87 |
| | .500 | .625 |
| K3 | 15,87 | 19,05 |
| | .625 | .750 |
| K4 | 19,05 | 22,23 |
| | .750 | .875 |
| K5 | 22,23 | 25,4 |
| | .875 | 1.000 |
| K6 | 25,4 | 28,45 |
| | 1.000 | 1.120 |
| K7 | 28,45 | 31,75 |
| | 1.120 | 1.250 |
| K8 | 32,77 | 38,1 |
| | 1.290 | 1.500 |
| K9 | 39.62 | 41,28 |
| | 1.560 | 1.625 |
| K10 | 41.28 | 44,45 |
| | 1.625 | 1.750 |

Dimensions are mm. over inches

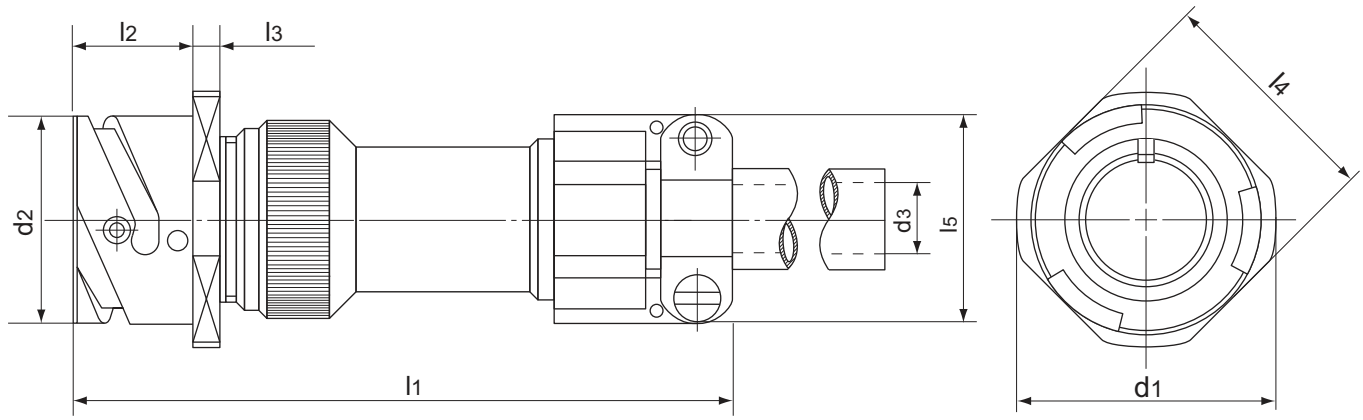
Inline receptacle with a long backshell and cable clamp for jacketed cables. LCFZ type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ open | $d_3$ closed | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 7,93 | 2,38 | 101 | 14,2 | 2,8 | 20,6 |
| | 0.99 | 0.72 | .312 | .094 | 3.98 | 0.56 | 0.11 | 0.81 |
| 14S | 29,8 | 24,6 | 11,12 | 6,35 | 101 | 14,2 | 3,2 | 25,4 |
| | 1.17 | 0.97 | .438 | .25 | 3.98 | 0.56 | 0.12 | 1.0 |
| 16S | 32,3 | 27,4 | 13,48 | 8 | 101 | 14,2 | 3,2 | 28,6 |
| | 1.27 | 1.08 | .531 | .315 | 3.98 | 0.56 | 0.12 | 1.12 |
| 16 | 32,3 | 27,4 | 13,48 | 8 | 114 | 19 | 3,2 | 28,6 |
| | 1.27 | 1.08 | .531 | .315 | 4.49 | 0.75 | 0.12 | 1.12 |
| 18 | 34,8 | 30,8 | 15,87 | 9,6 | 119 | 19 | 4 | 31,7 |
| | 1.37 | 1.21 | .625 | .375 | 4.68 | 0.75 | 0.16 | 1.25 |
| 20 | 37,8 | 34,2 | 19,0 | 11,3 | 119 | 19 | 4 | 34,9 |
| | 1.49 | 1.35 | .748 | .445 | 4.68 | 0.75 | 0.16 | 1.37 |
| 22 | 41,1 | 37,4 | 19.0 | 11,3 | 119 | 19 | 4 | 38,1 |
| | 1.62 | 1.47 | .748 | .445 | 4.68 | 0.75 | 0.16 | 1.5 |
| 24 | 44,6 | 40,9 | 23,8 | 15,5 | 124 | 20,6 | 4 | 41,3 |
| | 1.75 | 1.61 | .938 | .610 | 4.88 | 0.81 | 0.16 | 1.62 |
| 28 | 50,9 | 46,7 | 23,8 | 15,5 | 130 | 20,6 | 4 | 47,6 |
| | 2.0 | 1.84 | .938 | .610 | 5.12 | 0.81 | 0.16 | 1.87 |
| 32 | 57,1 | 53,4 | 31,75 | 23,4 | 137 | 22,2 | 4 | 54 |
| | 2.25 | 2.10 | 1.250 | .921 | 5.39 | 0.87 | 0.16 | 2.12 |
| 36 | 63,6 | 59,6 | 35 | 23,4 | 144 | 22,2 | 4 | 60,6 |
| | 2.50 | 2.35 | 1.378 | .921 | 5.67 | 0.87 | 0.16 | 2.38 |
| 40 | 70 | 65,5 | 41,25 | 29,9 | 144 | 22,2 | 4 | 66,5 |
| | 2.75 | 2.58 | 1.625 | 1.177 | 5.67 | 0.87 | 0.16 | 2.62 |

Dimensions are mm. over inches

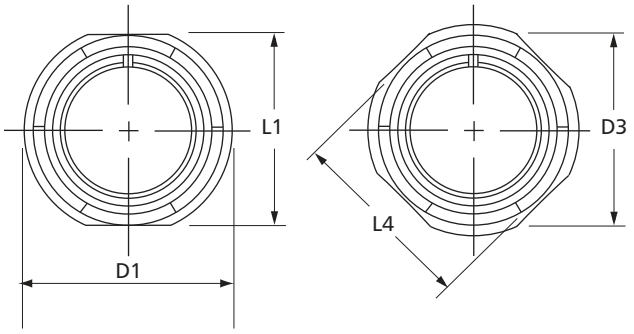
Inline receptacle with a long backshell and cable clamp with bushing. LF type also has an individual wire sealing grommet.

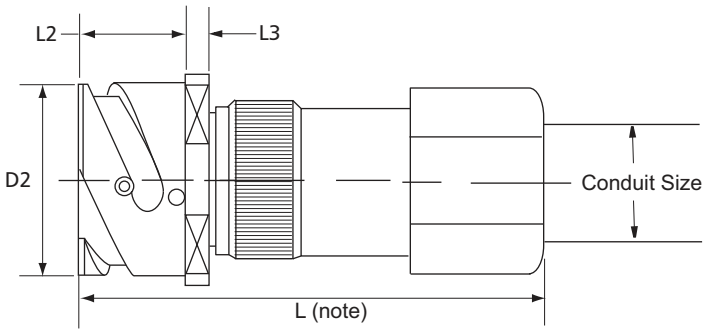



| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ * max | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ max. |
|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 5,6 | 92 | 14,2 | 2,8 | 20,6 | 22,7 |
| | 0.99 | 0.72 | 0.22 | 3.62 | 0.56 | 0.11 | 0.81 | 0.89 |
| 14S | 29,8 | 24,6 | 7,9 | 93 | 14,2 | 3,2 | 25,4 | 27,5 |
| | 1.17 | 0.97 | 0.31 | 3.66 | 0.56 | 0.12 | 1.00 | 1.08 |
| 16S | 32,3 | 27,4 | 11 | 95 | 14,2 | 3,2 | 28,6 | 30 |
| | 1.27 | 1.08 | 0.43 | 3.74 | 0.56 | 0.12 | 1.12 | 1.18 |
| 16 | 32,3 | 27,4 | 11 | 111 | 19 | 3,2 | 28,6 | 30 |
| | 1.27 | 1.08 | 0.43 | 4.37 | 0.75 | 0.12 | 1.12 | 1.18 |
| 18 | 34,8 | 30,8 | 14,2 | 111 | 19 | 4 | 31,7 | 32,2 |
| | 1.37 | 1.21 | 0.56 | 4.37 | 0.75 | 0.16 | 1.25 | 1.27 |
| 20 | 37,8 | 34,2 | 15,8 | 111 | 19 | 4 | 34,9 | 37,5 |
| | 1.49 | 1.35 | 0.62 | 4.37 | 0.75 | 0.16 | 1.37 | 1.48 |
| 22 | 41,1 | 37,4 | 15,8 | 111 | 19 | 4 | 38,1 | 37,5 |
| | 1.62 | 1.47 | 0.62 | 4.37 | 0.75 | 0.16 | 1.50 | 1.48 |
| 24 | 44,6 | 40,9 | 19 | 113 | 20,6 | 4 | 41,3 | 43,3 |
| | 1.75 | 1.61 | 0.75 | 4.45 | 0.81 | 0.16 | 1.62 | 1.70 |
| 28 | 50,9 | 46,7 | 19 | 121 | 20,6 | 4 | 47,6 | 43,3 |
| | 2.00 | 1.84 | 0.75 | 4.76 | 0.81 | 0.16 | 1.87 | 1.70 |
| 32 | 57,1 | 53,4 | 23,8 | 123 | 22,2 | 4 | 54 | 51,7 |
| | 2.25 | 2.10 | 0.94 | 4.84 | 0.87 | 0.16 | 2.12 | 2.03 |
| 36 | 63,6 | 59,6 | 31,7 | 125 | 22,2 | 4 | 60,6 | 58 |
| | 2.50 | 2.35 | 1.25 | 4.92 | 0.87 | 0.16 | 2.38 | 2.28 |
| 40 | 70 | 65,5 | 34,9 | 138 | 22,2 | 4 | 66,5 | 68,5 |
| | 2.75 | 2.58 | 1.37 | 5.43 | 0.87 | 0.16 | 2.62 | 2.70 |

* Max. permissible outside diameter of cable.
Dimensions are mm. over inches

Inline receptacle for terminating conduit. Straight long RK backshell with adapter and backnut assembly to seal and grip on the jacket of a steel core flexible *EF type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. ARK same as RK but without a grommet or compression ring.



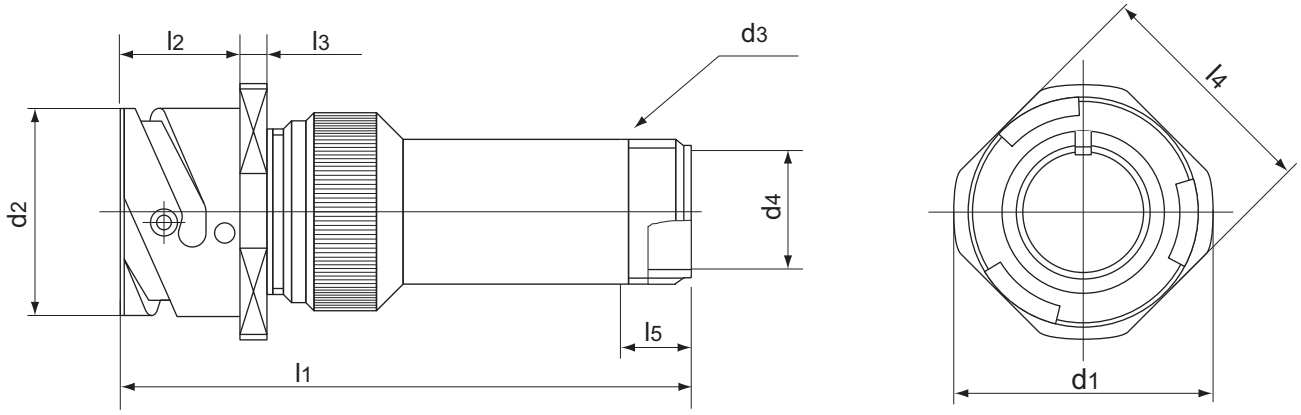

Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 |
|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 |

| Conduit (EF Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Dimensions are mm. over inches

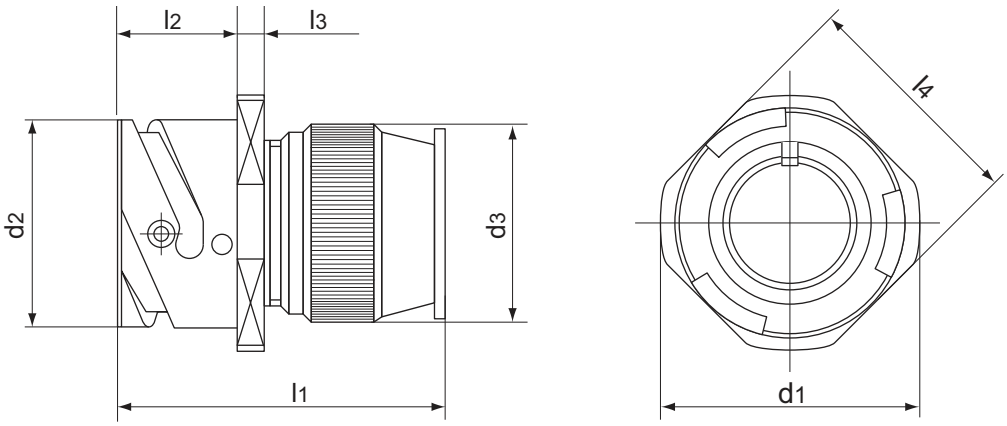
Inline receptacle with a long backshell. RL and LR type have an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ Thread in inches | $d_4$ +0,1 -0 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ min. |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 5/8-24 UNEF-2A | 8,5 | 71 | 14,2 | 2,8 | 20,6 | 9,5 |
| | 0.99 | 0.72 | | 0.33 | 2.79 | 0.56 | 0.11 | 0.81 | 0.37 |
| 14S | 29,8 | 24,6 | 3/4-20 UNEF-2A | 11,7 | 71 | 14,2 | 3,2 | 25,4 | 9,5 |
| | 1.17 | 0.97 | | 0.46 | 2.79 | 0.56 | 0.12 | 1.0 | 0.37 |
| 16S | 32,3 | 27,4 | 7/8-20 UNEF-2A | 13,9 | 71 | 14,2 | 3,2 | 28,6 | 9,5 |
| | 1.27 | 1.08 | | 0.55 | 2.79 | 0.56 | 0.12 | 1.12 | 0.37 |
| 16 | 32,3 | 27,4 | 7/8-20 UNEF-2A | 13,9 | 87 | 19 | 3,2 | 28,6 | 9,5 |
| | 1.27 | 1.08 | | 0.55 | 3.42 | 0.75 | 0.12 | 1.12 | 0.37 |
| 18 | 34,8 | 30,8 | 1"-20 UNEF-2A | 16,9 | 87 | 19 | 4 | 31,7 | 9,5 |
| | 1.37 | 1.21 | | 0.66 | 3.42 | 0.75 | 0.16 | 1.25 | 0.37 |
| 20 | 37,8 | 34,2 | 1"3/16-18 UNEF-2A | 20,9 | 87 | 19 | 4 | 34,9 | 9,5 |
| | 1.49 | 1,35 | | 0.82 | 3.42 | 0.75 | 0.16 | 1.37 | 0.37 |
| 22 | 41,1 | 37,4 | 1"3/16-18 UNEF-2A | 20,9 | 87 | 19 | 4 | 38,1 | 9,5 |
| | 1.62 | 1.47 | | 0.82 | 3.42 | 0.75 | 0.16 | 1.5 | 0.37 |
| 24 | 44,6 | 40,9 | 1"7/16-18 UNEF-2A | 25,9 | 87 | 20,6 | 4 | 41,3 | 9,5 |
| | 1.75 | 1.61 | | 1.02 | 3.42 | 0.81 | 0.16 | 1.62 | 0.37 |
| 28 | 50,9 | 46,7 | 1"7/16-18 UNEF-2A | 25,9 | 95 | 20,6 | 4 | 47,6 | 9,5 |
| | 2.0 | 1.84 | | 1.02 | 3.74 | 0.81 | 0.16 | 1.87 | 0.37 |
| 32 | 57,1 | 53,4 | 1"3/4-18 UNS-2A | 32 | 95 | 22,2 | 4 | 54 | 11 |
| | 2.25 | 2.10 | | 1.26 | 3.74 | 0.87 | 0.16 | 2.12 | 0.43 |
| 36 | 63,6 | 59,6 | 2"-18 UNS-2A | 36,9 | 95 | 22,2 | 4 | 60,6 | 11,8 |
| | 2.50 | 2.35 | | 1.45 | 3.74 | 0.87 | 0.16 | 2.38 | 0.46 |
| 40 | 70 | 65,5 | 2"1/4-16 UN-2A | 44,9 | 95 | 22,2 | 4 | 66,5 | 11,8 |
| | 2.75 | 2.58 | | 1.77 | 3.74 | 0.87 | 0.16 | 2.62 | 0.46 |

Dimensions are mm. over inches

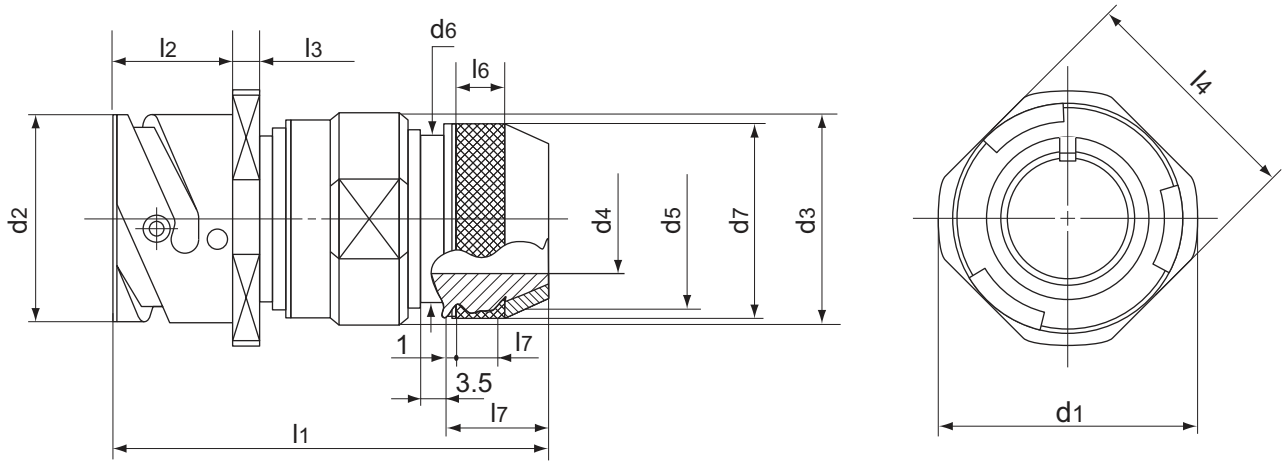
Inline receptacle with an individual wire sealing grommet and a short backshell. ARV type has no wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ max | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 |
|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 20 | 40 | 14,2 | 2,8 | 20,6 |
| | 0.99 | 0.72 | 0.79 | 1.57 | 0.56 | 0.11 | 0.81 |
| 14S | 29,8 | 24,6 | 24 | 40 | 14,2 | 3,2 | 25,4 |
| | 1.17 | 0.97 | 0.94 | 1.57 | 0.56 | 0.12 | 1.0 |
| 16S | 32,3 | 27,4 | 26 | 40 | 14,2 | 3,2 | 28,6 |
| | 1.27 | 1.08 | 1.02 | 1.57 | 0.56 | 0.12 | 1.12 |
| 16 | 32,3 | 27,4 | 26 | 56 | 19 | 3,2 | 28,6 |
| | 1.27 | 1.08 | 1.02 | 2.20 | 0.75 | 0.12 | 1.12 |
| 18 | 34,8 | 30,8 | 29,5 | 56 | 19 | 4 | 31,7 |
| | 1.37 | 1.21 | 1.16 | 2.20 | 0.75 | 0.16 | 1.25 |
| 20 | 37,8 | 34,2 | 33 | 57 | 19 | 4 | 34,9 |
| | 1.49 | 1.35 | 1.30 | 2.24 | 0.75 | 0.16 | 1.37 |
| 22 | 41,1 | 37,4 | 36 | 57 | 19 | 4 | 38,1 |
| | 1.62 | 1.47 | 1.42 | 2.24 | 0.75 | 0.16 | 1.5 |
| 24 | 44,6 | 40,9 | 40 | 59 | 20,6 | 4 | 41,3 |
| | 1.75 | 1.61 | 1.57 | 2.32 | 0.81 | 0.16 | 1.62 |
| 28 | 50,9 | 46,7 | 46 | 59 | 20,6 | 4 | 47,6 |
| | 2.0 | 1.84 | 1.81 | 2.32 | 0.81 | 0.16 | 1.87 |
| 32 | 57,1 | 53,4 | 51,5 | 60 | 22,2 | 4 | 54 |
| | 2.25 | 2.10 | 2.03 | 2.36 | 0.87 | 0.16 | 2.12 |
| 36 | 63,6 | 59,6 | 58 | 60 | 22,2 | 4 | 60,6 |
| | 2.50 | 2.35 | 2.28 | 2.36 | 0.87 | 0.16 | 2.38 |
| 40 | 70 | 65,5 | 64,5 | 61 | 22,2 | 4 | 66,5 |
| | 2.75 | 2.58 | 2.54 | 2.40 | 0.87 | 0.16 | 2.62 |

Dimensions are mm. over inches

Inline receptacle with an individual wire sealing grommet and special backshell for shield braid termination (for shielding characteristics, see page 12). To be used with heat shrinkable tubing. ASB type has no wire sealing grommet.

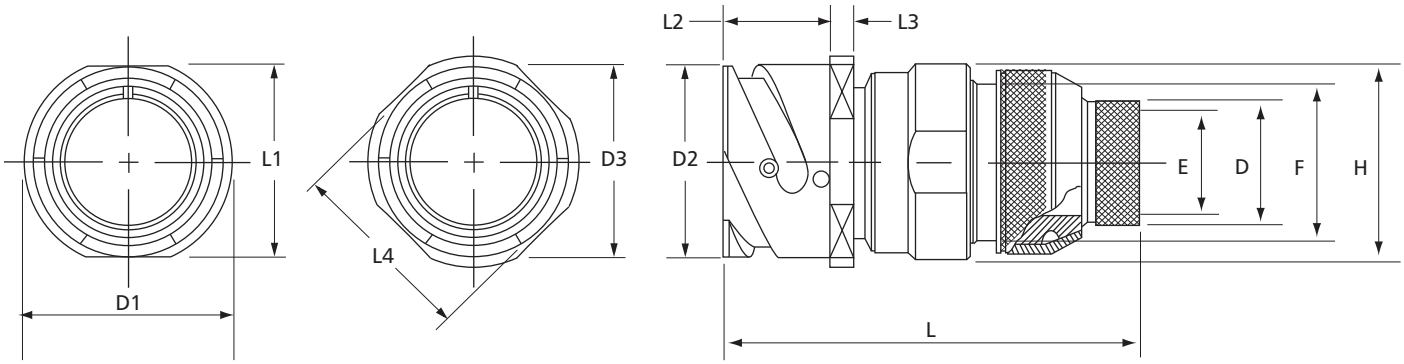



| Shell Size | $d_1$ max. | $d_2$ +0 -0,15 | $d_3$ max. | $d_4$ min. | $d_5$ Thread | $d_6$ max. | $d_7$ +0,5 -0 | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,2 | $l_5$ min. | $l_6$ ±0,5 | $l_7$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 25,2 | 18,2 | 22 | 8,6 | M16x1 | 16,3 | 18,5 | 52,2 | 14,2 | 2,8 | 20,6 | 4,5 | 5,5 | 17 |
| | 0.99 | 0.72 | 0.87 | 0.34 | | 0.64 | 0.73 | 2.05 | 0.56 | 0.11 | 0.81 | 0.18 | 0.22 | 0.67 |
| 14S | 29,8 | 24,6 | 25 | 10,6 | M20x1 | 20 | 22 | 52,2 | 14,2 | 3,2 | 25,4 | 5 | 7 | 17 |
| | 1.17 | 0.97 | 0.98 | 0.42 | | 0.79 | 0.87 | 2.05 | 0.56 | 0.12 | 1.0 | .20 | 0.27 | 0.67 |
| 16S | 32,3 | 27,4 | 28 | 13,5 | M23x1 | 23 | 25 | 54,2 | 14,2 | 3,2 | 28,6 | 6 | 8 | 18,5 |
| | 1.27 | 1.08 | 1.10 | 0.53 | | 0.90 | 0.98 | 2.13 | 0.56 | 0.12 | 1.12 | 0.24 | 0.31 | 0.73 |
| 16 | 32,3 | 27,4 | 28 | 13,5 | M23x1 | 23 | 25 | 63,3 | 19 | 3,2 | 28,6 | 6 | 8 | 18,5 |
| | 1.27 | 1.08 | 1.10 | 0.53 | | 0.90 | 0.98 | 2.49 | 0.75 | 0.12 | 1.12 | 0.24 | 0.31 | 0.73 |
| 18 | 34,8 | 30,8 | 31 | 14,6 | M26x1 | 24,5 | 28 | 64,5 | 19 | 4 | 31,7 | 6 | 8 | 18,5 |
| | 1.37 | 1.21 | 1.22 | 0.57 | | 0.96 | 1.10 | 2.54 | 0.75 | 0.16 | 1.25 | 0.24 | 0.31 | 0.73 |
| 20 | 37,8 | 34,2 | 35 | 18,5 | M30x1 | 28,5 | 32 | 64,5 | 19 | 4 | 34,9 | 6 | 10 | 18,5 |
| | 1.49 | 1.35 | 1.38 | 0.73 | | 1.12 | 1.26 | 2.54 | 0.75 | 0.16 | 1.37 | 0.24 | 0.39 | 0.73 |
| 22 | 41,1 | 37,4 | 38 | 20,8 | M32x1 | 30,5 | 34 | 64,5 | 19 | 4 | 38,1 | 6 | 10 | 18,5 |
| | 1.62 | 1.47 | 1.50 | 0.82 | | 1.20 | 1.34 | 2.54 | 0.75 | 0.16 | 1.50 | 0.24 | 0.39 | 0.73 |
| 24 | 44,6 | 40,9 | 41 | 24,6 | M36x1 | 34,5 | 38 | 65,2 | 20,6 | 4 | 41,3 | 6 | 10 | 18,5 |
| | 1.75 | 1.61 | 1.61 | 0.97 | | 1.36 | 1.50 | 2.57 | 0.81 | 0.16 | 1.62 | 0.24 | 0.39 | 0.73 |
| 28 | 50,9 | 46,7 | 48 | 27 | M39x1 | 37,5 | 41 | 65,2 | 20,6 | 4 | 47,6 | 6 | 10 | 18,5 |
| | 2.00 | 1.84 | 1.89 | 1.06 | | 1.48 | 1.61 | 2.57 | 0.81 | 0.16 | 1.87 | 0.24 | 0.39 | 0.73 |
| 32 | 57,1 | 53,4 | 54 | 33,3 | M45x1 | 44 | 48 | 66,8 | 22,2 | 4 | 54 | 6 | 10 | 18,5 |
| | 2.25 | 2.10 | 2.12 | 1.31 | | 1.73 | 1.89 | 2.63 | 0.87 | 0.16 | 2.12 | 0.24 | 0.39 | 0.73 |
| 36 | 63,6 | 59,6 | 61 | 38,5 | M52x1 | 51 | 55 | 66,8 | 22,2 | 4 | 60,6 | 6 | 10 | 18,5 |
| | 2.50 | 2.35 | 2.40 | 1.51 | | 2.00 | 2.16 | 2.63 | 0.87 | 0.16 | 2.38 | 0.24 | 0.39 | 0.73 |
| 40 | 70 | 65,5 | 68 | 46 | M59x1 | 58 | 62 | 66,8 | 22,2 | 4 | 66,5 | 6 | 10 | 18,5 |
| | 2.75 | 2.58 | 2.68 | 1.81 | | 2.28 | 2.44 | 2.63 | 0.87 | 0.16 | 2.62 | 0.24 | 0.39 | 0.73 |

* Nominal dimension with tightend backshell

Dimensions are mm. over inches

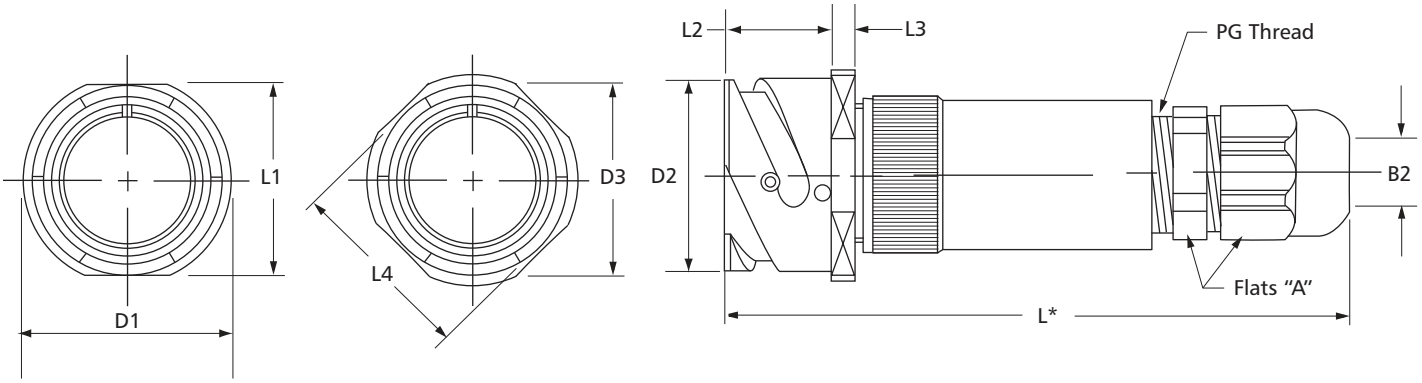
Inline receptacle for terminating braided shield. Straight backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not included). ASBT same as SBT but without a grommet.




| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 | H +/- 0,5 .020 | G | F | E +/- 0,25 .010 | D Max. | CIR01,00 Approx. | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 | 22,0 | 18,5 | 16,3 | 7,9 | 11,13 | 61,1 | TR 05 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 | .866 | .73 | .64 | .312 | .44 | 2.41 | |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 | 24,8 | 22,0 | 20,0 | 11,1 | 14,3 | 61,1 | TR 07 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 | .976 | .87 | .79 | .437 | .56 | 2.41 | |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 | 27,8 | 25,0 | 23,0 | 12,7 | 15,9 | 63,1 | TR 08 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 | 1.094 | .98 | .91 | .500 | .63 | 2.48 | |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 | 27.8 | 25,0 | 23,0 | 12,7 | 15,9 | 72,2 | TR 08 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 | 1.094 | .98 | .91 | .500 | .63 | 2.84 | |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 | 30,8 | 28,0 | 24,5 | 15,88 | 19,1 | 73,4 | TR 10 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 | 1.213 | 1.10 | .97 | .625 | .75 | 2.89 | |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 | 34,8 | 32,0 | 28.5 | 19,05 | 22,3 | 74,6 | TR 12 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 | 1.370 | 1.26 | 1.12 | .750 | .88 | 2.94 | |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 | 37,8 | 34,0 | 30,5 | 22,2 | 25,4 | 73,9 | TR 14 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 | 1.488 | 1.34 | 1.20 | .875 | 1.00 | 2.91 | |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 | 40,8 | 38,0 | 34,5 | 25,4 | 28,7 | 74,1 | TR 16 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 | 1.606 | 1.50 | 1.36 | 1.00 | 1.13 | 2.92 | |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 | 47,8 | 41,0 | 37,5 | 28,58 | 31,75 | 75,3 | TR 18 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 | 1.881 | 1.61 | 1.48 | 1.125 | 1.25 | 2.96 | |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 | 53,8 | 48,0 | 44,0 | 28,58 | 31,75 | 76,9 | TR 18 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 | 2.118 | 1.89 | 1.73 | 1.125 | 1.25 | 3.03 | |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 | 60,8 | 55,0 | 51,0 | 41,28 | 44,45 | 75,7 | Not Available |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 | 2.394 | 2.17 | 2.01 | 1.625 | 1.75 | 2.98 | |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 | 67,8 | 62,0 | 58,0 | 47,63 | 50,8 | 75,7 | Not Available |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 | 2.669 | 2.44 | 2.28 | 1.875 | 2.00 | 2.98 | |

Dimensions are mm. over inches

Inline receptacle for terminating jacketed cable. Long metal backshell and non-metalic fitting with PG thread. SL1 same as SL but includes a wire sealing grommet and compression ring.



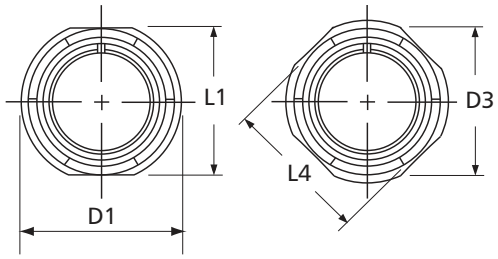

| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 |
|---|---|---|---|---|---|---|---|
| 10SL | 22,4 .88 | 18,2 .72 | 25,2 .992 | 18,2 .717 | 14,2 .559 | 2,8 .110 | 20,6 .811 |
| 14S | 28,8 1.13 | 24,6 .97 | 29,8 1.173 | 24,6 .969 | 14,2 .559 | 3,2 .126 | 25,4 1.00 |
| 16S | 31,6 1.24 | 27,4 1.08 | 32,3 1.272 | 27,4 1.079 | 14,2 .559 | 3,2 .126 | 28,6 1.126 |
| 16 | 31,6 1.24 | 27,4 1.08 | 32,3 1.272 | 27,4 1.079 | 19,0 .748 | 3,2 .126 | 28,6 1.126 |
| 18 | 35,0 1.38 | 30,8 1.21 | 34,8 1.370 | 30,8 1.213 | 19,0 .748 | 4,0 .157 | 31,7 1.248 |
| 20 | 38,1 1.50 | 34,2 1.35 | 37,8 1.488 | 34,2 1.346 | 19,0 .748 | 4,0 .157 | 34,9 1.374 |
| 22 | 41,1 1.62 | 37,4 1.47 | 41,1 1.618 | 37,4 1.472 | 19,0 .748 | 4,0 .157 | 38,1 1.500 |
| 24 | 44,6 1.76 | 40,9 1.61 | 44,6 1.756 | 40,9 1.610 | 20,6 .811 | 4,0 .157 | 41,3 1.626 |
| 28 | 50,9 2.00 | 46,7 1.84 | 50,9 2.004 | 46,7 1.839 | 20,6 .811 | 4,0 .157 | 47,6 1.874 |
| 32 | 57,1 2.25 | 53,4 2.10 | 57,1 2.248 | 53,4 2.102 | 22,2 8.74 | 4,0 .157 | 54,0 2.126 |
| 36 | 63,6 2.50 | 59,6 2.35 | 63,6 2.504 | 59,6 2.346 | 22,2 8.74 | 4,0 .157 | 60,6 2.386 |
| 40 | 69,7 2.74 | 65.5 2.58 | 70,0 2.756 | 65,5 2.579 | 22,2 8.74 | 4,0 .157 | 66,5 2.618 |

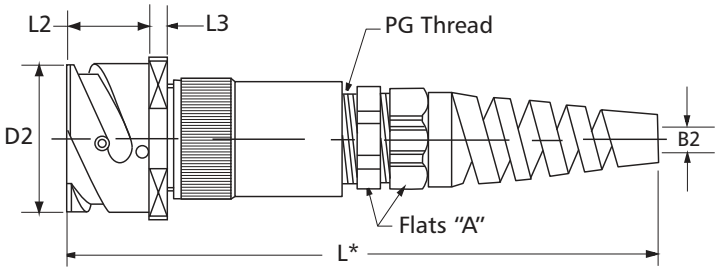
| B2 Suffix in Connector Part No. | B2 Cable Range Min. | B2 Cable Range Max. | B2 Suffix in Connector Part No. | B2 Cable Range Min. | B2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00 .118 | 6,48 .255 | (07R) | 2,00 .079 | 5,00 .197 | PG-7 | 15,01 .591 |
| (09) | 3,99 .157 | 7,98 .314 | (09R) | 2,00 .079 | 5,99 .236 | PG-9 | 19,05 .750 |
| (11) | 5,00 .197 | 10,0 .394 | (11R) | 3,00 .118 | 7,09 .279 | PG-11 | 22,00 .866 |
| (13) | 5,99 .236 | 11,99 .472 | (13R) | 8,66 .341 | 8,97 .353 | PG-13 | 24,13 .950 |
| (16) | 10,0 .394 | 13,99 .551 | (16R) | 10,74 .423 | 12,22 .481 | PG-16 | 27,00 1.063 |
| (21) | 13,84 .545 | 18,00 .709 | (21R) | 12,22 .481 | 15,67 .617 | PG-21 | 32,99 1.299 |
| (29) | 17,98 .708 | 24,99 .984 | (29R) | 13,00 .512 | 19,99 .787 | PG-29 | 42,01 1.654 |
| (36) | 22,0 .866 | 31,98 1.259 | (36R) | 19,99 .787 | 25,99 1,023 | PG-36 | 53,00 2.087 |
| (42) | 31,98 1.259 | 38,00 1.496 | (42R) | 24,00 .945 | 30,99 1.220 | PG-42 | 59.99 2.362 |
| (48) | 36,98 1.456 | 43,99 1.732 | (48R) | 28,98 1.141 | 35,00 1.378 | PG-48 | 64,99 2.559 |

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.

Dimensions are mm. over inches

Inline receptacle for terminating jacketed cable. Long metal backshell and non-metalic spiral fitting with PG thread (to prevent sharp angle bending). SLX1 same as SLX but includes a wire sealing grommet and compression ring.



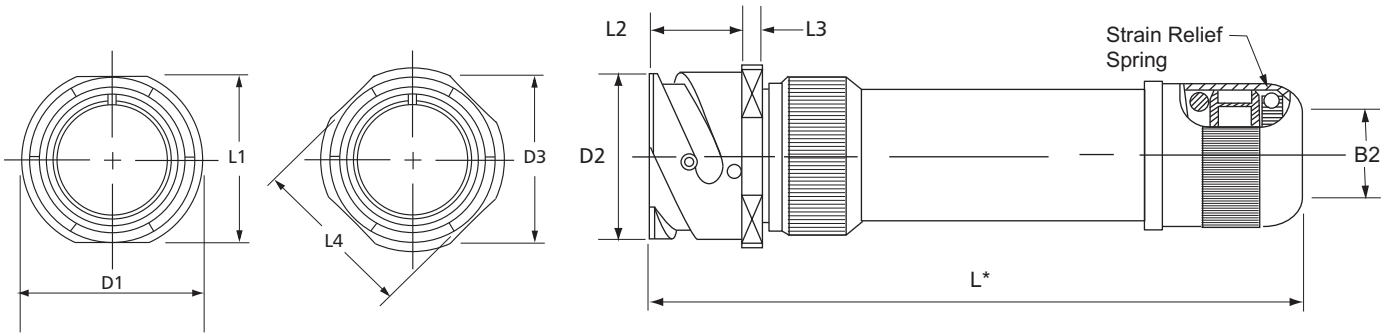

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.

| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 |
|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 |

| B2 Suffix in Connector Part No. | B2 Cable Range Min. | B2 Cable Range Max. | B2 Suffix in Connector Part No. | B2 Cable Range Min. | B2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00 | 6,48 | (07R) | 2,00 | 5,00 | PG-7 | 15,01 |
| | .118 | .255 | | .079 | .197 | | .591 |
| (09) | 3,99 | 7,98 | (09R) | 2,00 | 5,99 | PG-9 | 19,05 |
| | .157 | .314 | | .079 | .236 | | .750 |
| (11) | 5,00 | 10,0 | (11R) | 3,00 | 7,09 | PG-11 | 22,00 |
| | .197 | .394 | | .118 | .279 | | .866 |
| (13) | 5,99 | 11,99 | (13R) | 8,66 | 8,97 | PG-13 | 24,13 |
| | .236 | .472 | | .341 | .353 | | .950 |
| (16) | 10,0 | 13,99 | (16R) | 10,74 | 12,22 | PG-16 | 27,00 |
| | .394 | .551 | | .423 | .481 | | 1.063 |
| (21) | 13,84 | 18,00 | (21R) | 12,22 | 15,67 | PG-21 | 32,99 |
| | .545 | .709 | | .481 | .617 | | 1.299 |

Dimensions are mm. over inches

Inline receptacle for terminating jacketed cable. Long WK backshell and backnut assembly suitable to seal and grip on the jacket of the cable. WKG same as WK but includes a wire sealing grommet and compression ring.



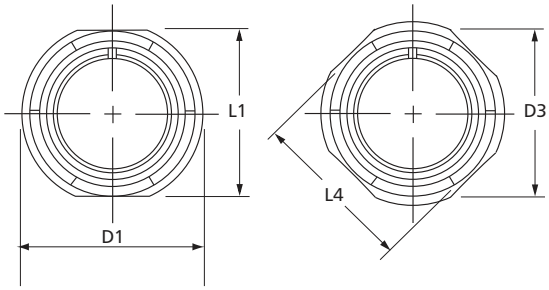

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

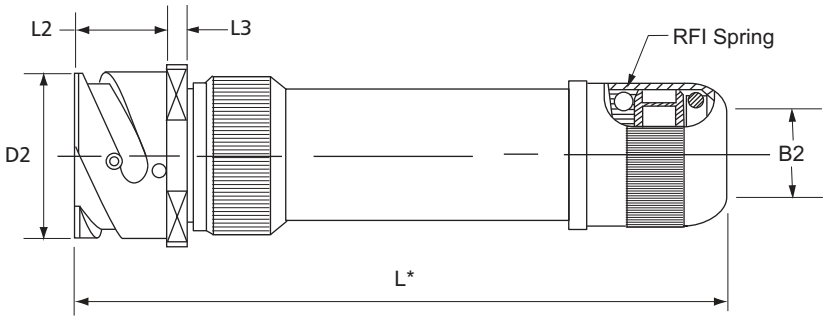
| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 |
|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 |

| B2 Suffix in Connector Part No. | B2 Cable Range Min. | Max. |
|---|---|---|
| 02 | 3,18 | 6,35 |
| | .125 | .250 |
| 03 | 3,99 | 9,53 |
| | .157 | .375 |
| 04 | 7,16 | 12,7 |
| | .282 | .500 |
| 05 | 10,34 | 15,8 |
| | .407 | .625 |
| 06 | 13,51 | 19,05 |
| | .532 | .750 |
| 07 | 16,69 | 22,23 |
| | .657 | .875 |
| 08 | 19,86 | 25,4 |
| | .782 | 1.000 |
| 09 | 23,04 | 28,58 |
| | .907 | 1.125 |
| 10 | 26,21 | 31,75 |
| | 1.032 | 1.250 |
| 11 | 29,39 | 34,93 |
| | 1.157 | 1.375 |
| 12 | 32,56 | 38,1 |
| | 1.282 | 1.500 |
| 17 | 50,80 | 53,99 |
| | 2.000 | 2.125 |

Dimensions are mm. over inches

Inline receptacle for terminating braided shield. Long WK backshell, grommet, and backnut assembly suitable for shield termination and strain relief on the jacket of the cable.



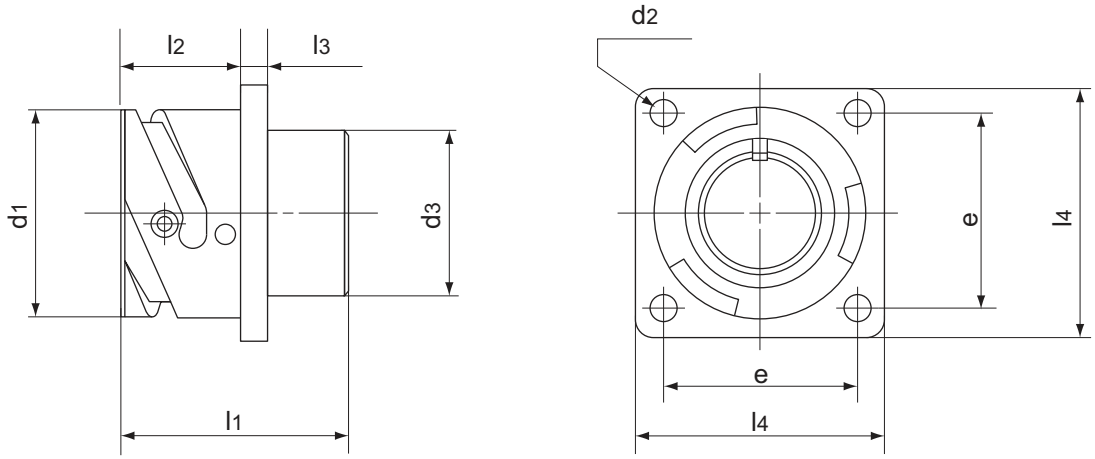

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

| Shell Size | $D_1$ Max. | $D_2$ Max. | $D_3$ +/- 0,2 .008 | $L_1$ +/- 0,2 .008 | $L_2$ + 0,4 .016 | $L_3$ +/- 0,2 .008 | $L_4$ +/- 0,2 .008 | L Approx. |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,4 | 18,2 | 25,2 | 18,2 | 14,2 | 2,8 | 20,6 | 111 |
| | .88 | .72 | .992 | .717 | .559 | .110 | .811 | 4.37 |
| 14S | 28,8 | 24,6 | 29,8 | 24,6 | 14,2 | 3,2 | 25,4 | 112 |
| | 1.13 | .97 | 1.173 | .969 | .559 | .126 | 1.00 | 4.41 |
| 16S | 31,6 | 27,4 | 32,3 | 27,4 | 14,2 | 3,2 | 28,6 | 100 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .559 | .126 | 1.126 | 3.94 |
| 16 | 31,6 | 27,4 | 32,3 | 27,4 | 19,0 | 3,2 | 28,6 | 110 |
| | 1.24 | 1.08 | 1.272 | 1.079 | .748 | .126 | 1.126 | 4.33 |
| 18 | 35,0 | 30,8 | 34,8 | 30,8 | 19,0 | 4,0 | 31,7 | 127 |
| | 1.38 | 1.21 | 1.370 | 1.213 | .748 | .157 | 1.248 | 5.00 |
| 20 | 38,1 | 34,2 | 37,8 | 34,2 | 19,0 | 4,0 | 34,9 | 127 |
| | 1.50 | 1.35 | 1.488 | 1.346 | .748 | .157 | 1.374 | 5.00 |
| 22 | 41,1 | 37,4 | 41,1 | 37,4 | 19,0 | 4,0 | 38,1 | 133 |
| | 1.62 | 1.47 | 1.618 | 1.472 | .748 | .157 | 1.500 | 5.24 |
| 24 | 44,6 | 40,9 | 44,6 | 40,9 | 20,6 | 4,0 | 41,3 | 134 |
| | 1.76 | 1.61 | 1.756 | 1.610 | .811 | .157 | 1.626 | 5.28 |
| 28 | 50,9 | 46,7 | 50,9 | 46,7 | 20,6 | 4,0 | 47,6 | 134 |
| | 2.00 | 1.84 | 2.004 | 1.839 | .811 | .157 | 1.874 | 5.28 |
| 32 | 57,1 | 53,4 | 57,1 | 53,4 | 22,2 | 4,0 | 54,0 | 136 |
| | 2.25 | 2.10 | 2.248 | 2.102 | 8.74 | .157 | 2.126 | 5.35 |
| 36 | 63,6 | 59,6 | 63,6 | 59,6 | 22,2 | 4,0 | 60,6 | 136 |
| | 2.50 | 2.35 | 2.504 | 2.346 | 8.74 | .157 | 2.386 | 5.35 |
| 40 | 69,7 | 65.5 | 70,0 | 65,5 | 22,2 | 4,0 | 66,5 | 136 |
| | 2.74 | 2.58 | 2.756 | 2.579 | 8.74 | .157 | 2.618 | 5.35 |

| B2 Suffix in Connector Part No. | B2 Cable Range Min. | Max. |
|---|---|---|
| 02 | 3,18 | 6,35 |
| | .125 | .250 |
| 03 | 3,99 | 9,53 |
| | .157 | .375 |
| 04 | 7,16 | 12,7 |
| | .282 | .500 |
| 05 | 10,34 | 15,8 |
| | .407 | .625 |
| 06 | 13,51 | 19,05 |
| | .532 | .750 |
| 07 | 16,69 | 22,23 |
| | .657 | .875 |
| 08 | 19,86 | 25,4 |
| | .782 | 1.000 |
| 09 | 23,04 | 28,58 |
| | .907 | 1.125 |
| 10 | 26,21 | 31,75 |
| | 1.032 | 1.250 |
| 11 | 29,39 | 34,93 |
| | 1.157 | 1.375 |
| 12 | 32,56 | 38,1 |
| | 1.282 | 1.500 |
| 17 | 50,80 | 53,99 |
| | 2.000 | 2.125 |

Dimensions are mm. over inches

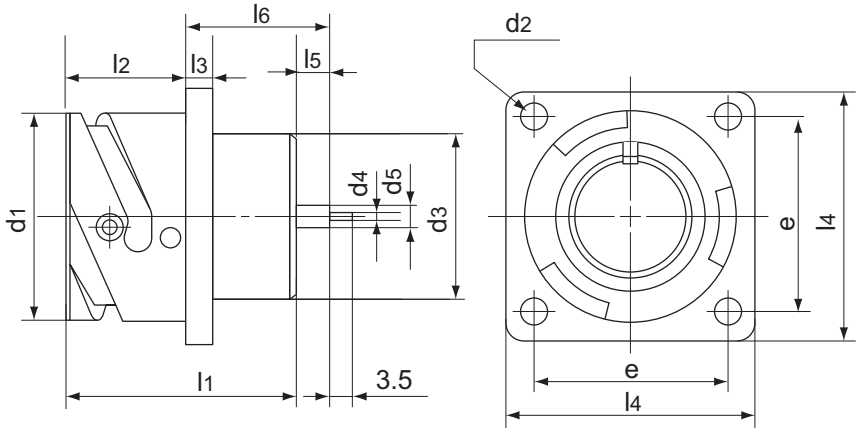
Receptacle with through mounting holes. For threaded and countersunk mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 15,9 | 18,2 | 25 | 14,2 | 2,8 | 25,4 |
| | 0.72 | 0.12 | 0.62 | 0.72 | 0.98 | 0.56 | 0.11 | 1.00 |
| 14S | 24,6 | 3,2 | 19,2 | 23 | 25 | 14,2 | 3,2 | 30 |
| | 0.97 | 0.12 | 0.75 | 0.90 | 0.98 | 0.56 | 0.12 | 1.18 |
| 16S | 27,4 | 3,2 | 22,4 | 24,6 | 25 | 14,2 | 3,2 | 32,5 |
| | 1,08 | 0.12 | 0.88 | 0.97 | 0.98 | 0.56 | 0.12 | 1.28 |
| 16 | 27,4 | 3,2 | 22,4 | 24,6 | 34,1 | 19 | 3,2 | 32,5 |
| | 1,08 | 0.12 | 0.88 | 0.97 | 1.34 | 0.75 | 0.12 | 1.28 |
| 18 | 30,8 | 3,2 | 25,6 | 27 | 34,1 | 19 | 4 | 35 |
| | 1.21 | 0.12 | 1.00 | 1.06 | 1.34 | 0.75 | 0.16 | 1.38 |
| 20 | 34,2 | 3,2 | 29 | 29,4 | 34,1 | 19 | 4 | 38 |
| | 1.35 | 0.12 | 1.14 | 1.16 | 1.34 | 0.75 | 0.16 | 1.50 |
| 22 | 37,4 | 3,2 | 32,2 | 31,8 | 34,1 | 19 | 4 | 41 |
| | 1.47 | 0.12 | 1.27 | 1.25 | 1.34 | 0.75 | 0.16 | 1.61 |
| 24 | 40,9 | 3,7 | 35,3 | 34,9 | 36 | 20,6 | 4 | 44,5 |
| | 1.61 | 0.14 | 1.39 | 1.37 | 1.42 | 0.81 | 0.16 | 1.75 |
| 28 | 46,7 | 3,7 | 41,4 | 39,7 | 36 | 20,6 | 4 | 50,8 |
| | 1.84 | 0.14 | 1.63 | 1.56 | 1.42 | 0.81 | 0.16 | 2.00 |
| 32 | 53,4 | 4,3 | 47,8 | 44,5 | 37,6 | 22,2 | 4 | 57 |
| | 2.10 | 0.17 | 1.88 | 1.75 | 1.48 | 0.87 | 0.16 | 2.24 |
| 36 | 59,6 | 4,3 | 54,1 | 49,2 | 37,6 | 22,2 | 4 | 63,5 |
| | 2.35 | 0.17 | 2.13 | 1.94 | 1.48 | 0.87 | 0.16 | 2.50 |
| 40 | 65,5 | 4,3 | 59 | 55,5 | 37,6 | 22,2 | 4 | 69,9 |
| | 2.58 | 0.17 | 2.32 | 2.18 | 1.48 | 0.87 | 0.16 | 2.75 |

Dimensions are mm. over inches

Receptacle with through mounting holes, and PCB style contacts. For threaded and countersunk mounting holes, see page 197.




Connectors are available only with arrangements having contact sizes 16S-16 and 12. For different contact sizes, please consult factory.

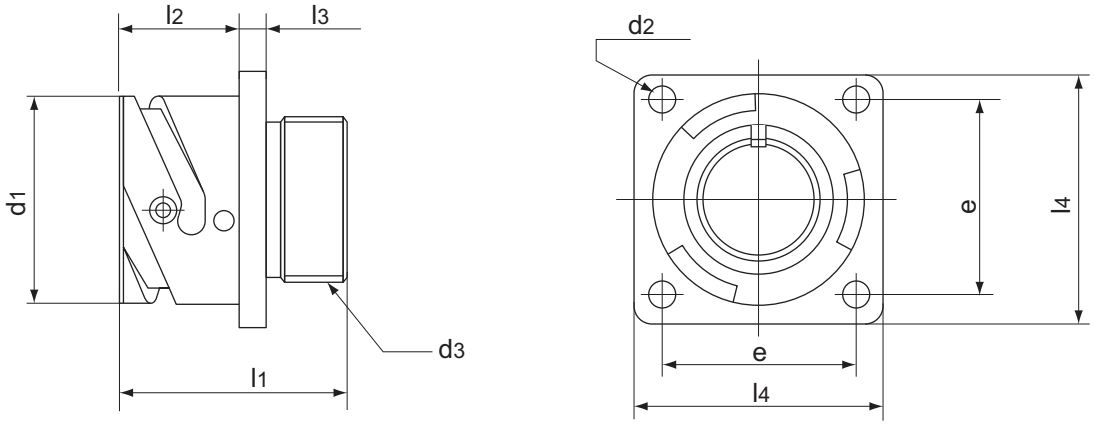
| Available contact | $d_4$ +0 -0,05 | $d_5$ +0 -0,1 |
|---|---|---|
| Size 16S and 16 | 0.75 | 1,6 |
| Size 12 | 1,8 | 3,4 |

| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ max. | e +0,1 | $l_1$ max. | $l_2$ +0,4 -1 | $l_3$ ±0,2 | $l_4$ ±0,3 | Type YM | | Type YM1 | | Type YM2 | | Type YM3 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | $l_5$ | $l_6$ | $l_5$ | $l_6$ | $l_5$ | $l_6$ | $l_5$ | $l_6$ |
| 10SL | 18,2 | 3,2 | 15,9 | 18,2 | 25 | 14,2 | 2,8 | 25,4 | 5 | 15,5 | 10* | 20,5* | 3,4* | 13,9* | 1,8 | 12,3 |
| | 0.72 | 0.12 | 0.62 | 0.72 | 0.98 | 0.56 | 0.11 | 1.00 | 0.20 | 0.61 | 0.39 | 0.81 | 0.13 | 0.55 | 0.07 | 0.48 |
| 14S | 24,6 | 3,2 | 19,2 | 23 | 25 | 14,2 | 3,2 | 30 | 5 | 15,5 | 10* | 20,5* | 3,4* | 13,9* | 1,8 | 12,3 |
| | 0.97 | 0.12 | 0.75 | 0.90 | 0.98 | 0.56 | 0.12 | 1.18 | 0.20 | 0.61 | 0.39* | 0.81 | 0.13 | 0.55 | 0.07 | 0.48 |
| 16S | 27,4 | 3,2 | 22,4 | 24,6 | 25 | 14,2 | 3,2 | 32,5 | 5 | 15,5 | 10* | 20,5* | 3,4* | 13,9* | 1,8 | 12,3 |
| | 1.08 | 0.12 | 0.88 | 0.97 | 0.98 | 0.56 | 0.12 | 1.28 | 0.20 | 0.61 | 0.39 | 0.81 | 0.13 | 0.55 | 0.07 | 0.48 |
| 16 | 27,4 | 3,2 | 22,4 | 24,6 | 34,1 | 19 | 3,2 | 32,5 | 5 | 20 | 6,6 | 21,6 | 3,4* | 18,4* | 1,8 | 16,8 |
| | 1.08 | 0.12 | 0.88 | 0.97 | 1.34 | 0.75 | 0.12 | 1.28 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 18 | 30,8 | 3,2 | 25,6 | 27 | 34,1 | 19 | 4 | 35 | 5 | 20 | 6,6 | 21,6 | 3,4* | 18,4* | 1,8 | 16,8 |
| | 1.21 | 0.12 | 1.00 | 1.06 | 1.34 | 0.75 | 0.16 | 1.38 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 20 | 34,2 | 3,2 | 29 | 29,4 | 34,1 | 19 | 4 | 38 | 5 | 20 | 6,6 | 21,6 | 3,4* | 18,4* | 1,8 | 16,8 |
| | 1.35 | 0.12 | 1.14 | 1.16 | 1.34 | 0.75 | 0.16 | 1.50 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 22 | 37,4 | 3,2 | 32,2 | 31,8 | 34,1 | 19 | 4 | 41 | 5 | 20 | 6,6 | 21,6 | 3,4* | 18,4* | 1,8 | 16,8 |
| | 1.47 | 0.12 | 1.27 | 1.25 | 1.34 | 0.75 | 0.16 | 1.61 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 24 | 40,9 | 3,7 | 35,3 | 34,9 | 36 | 20,6 | 4 | 44,5 | 5 | 20 | 6,6* | 21,6* | 3,4 | 18,4 | 1,8* | 16,8* |
| | 1.61 | 0.14 | 1.39 | 1.37 | 1.42 | 0.81 | 0.16 | 1.75 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 28 | 46,7 | 3,7 | 41,4 | 39,7 | 36 | 20,6 | 4 | 50,8 | 5 | 20 | 6,6* | 21,6* | 3,4 | 18,4 | 1,8* | 16,8* |
| | 1.84 | 0.14 | 1.63 | 1.56 | 1.42 | 0.81 | 0.16 | 2.00 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 32 | 53,4 | 4,3 | 47,8 | 44,5 | 37,6 | 22,2 | 4 | 57 | 5* | 20* | 6,6* | 21,6* | 3,4 | 18,4 | 1,8 | 16,8 |
| | 2.10 | 0.17 | 1.88 | 1.75 | 1.48 | 0.87 | 0.16 | 2.24 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 36 | 59,6 | 4,3 | 54,1 | 49,2 | 37,6 | 22,2 | 4 | 63,5 | 5* | 20* | 6,6* | 21,6* | 3,4 | 18,4 | 1,8 | 16,8 |
| | 2.35 | 0.17 | 2.13 | 1.94 | 1.48 | 0.87 | 0.16 | 2.50 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |
| 40 | 65,5 | 4,3 | 59 | 55,5 | 37,6 | 22,2 | 4 | 69,9 | 5* | 20* | 6,6* | 21,6* | 3,4 | 18,4 | 1,8 | 16,8 |
| | 2.58 | 0.17 | 2.32 | 2.18 | 1.48 | 0.87 | 0.16 | 2.75 | 0.20 | 0.79 | 0.26 | 0.85 | 0.13 | 0.72 | 0.07 | 0.66 |

* Consult Factory

Dimensions are mm. over inches

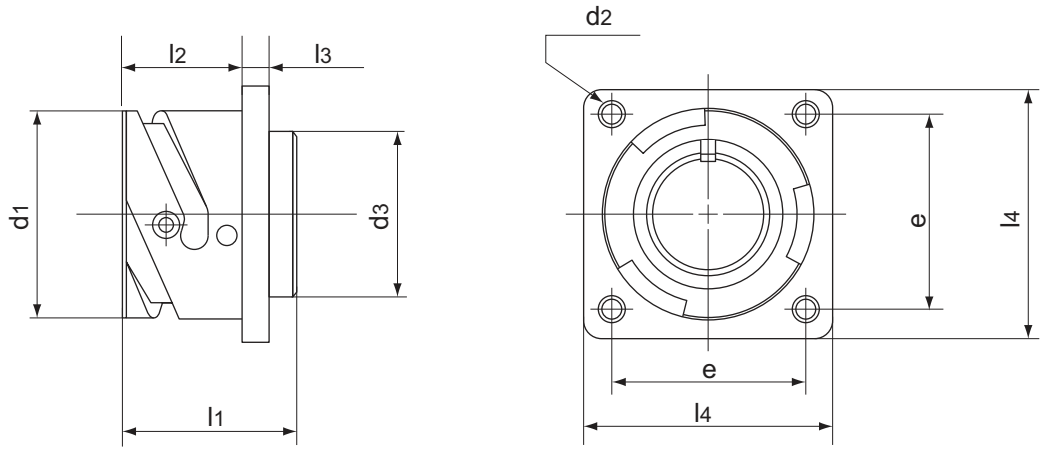
Receptacle with through mounting holes and a threaded back end. For threaded and countersunk mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | $d_3$ Thread in inches | e ±0,1 | $l_1$ ±0,3 | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 5/8-24 UNEF-2A | 18,2 | 24,7 | 14,2 | 2,8 | 25,4 |
| | 0.72 | 0.12 | | 0.72 | 0.97 | 0.56 | 0.11 | 1.00 |
| 14S | 24,6 | 3,2 | 3/4-20 UNEF-2A | 23 | 24,7 | 14,2 | 3,2 | 30 |
| | 0.97 | 0.12 | | 0.90 | 0.97 | 0.56 | 0.12 | 1.18 |
| 16S | 27,4 | 3,2 | 7/8-20 UNEF-2A | 24,6 | 24,7 | 14,2 | 3,2 | 32,5 |
| | 1.08 | 0.12 | | 0.97 | 0.97 | 0.56 | 0.12 | 1.28 |
| 16 | 27,4 | 3,2 | 7/8-20 UNEF-2A | 24,6 | 33,8 | 19 | 3,2 | 32,5 |
| | 1.08 | 0.12 | | 0.97 | 1.33 | 0.75 | 0.12 | 1.28 |
| 18 | 30,8 | 3,2 | 1”-20 UNEF-2A | 27 | 33,8 | 19 | 4 | 35 |
| | 1.21 | 0.12 | | 1.06 | 1.33 | 0.75 | 0.16 | 1.38 |
| 20 | 34,2 | 3,2 | 1 1/8”-18 UNEF-2A | 29,4 | 33,8 | 19 | 4 | 38 |
| | 1.35 | 0.12 | | 1.16 | 1.33 | 0.75 | 0.16 | 1.50 |
| 22 | 37,4 | 3,2 | 1 1/4”-18 UNEF-2A | 31,8 | 33,8 | 19 | 4 | 41 |
| | 1.47 | 0.12 | | 1.25 | 1.33 | 0.75 | 0.16 | 1.61 |
| 24 | 40,9 | 3,7 | 1 3/8”-18 UNEF-2A | 34,9 | 35,7 | 20,6 | 4 | 44,5 |
| | 1.61 | 0.14 | | 1.37 | 1.40 | 0.81 | 0.16 | 1.75 |
| 28 | 46,7 | 3,7 | 1 5/8”-18 UNEF-2A | 39,7 | 35,7 | 20,6 | 4 | 50,8 |
| | 1.84 | 0.14 | | 1.56 | 1.40 | 0.81 | 0.16 | 2.00 |
| 32 | 53,4 | 4,3 | 1 7/8”-16 UN-2A | 44,5 | 37,3 | 22,2 | 4 | 57 |
| | 2.10 | 0.17 | | 1.75 | 1.47 | 0.87 | 0.16 | 2.24 |
| 36 | 59,6 | 4,3 | 2” 1/16-16 UN-2A | 49,2 | 37,3 | 22,2 | 4 | 63,5 |
| | 2.35 | 0.17 | | 1.94 | 1.47 | 0.87 | 0.16 | 2.50 |
| 40 | 65,5 | 4,3 | 2” 5/16-16 UN-2A | 55,5 | 37,3 | 22,2 | 4 | 69,9 |
| | 2.58 | 0.17 | | 2.18 | 1.47 | 0.87 | 0.16 | 2.75 |

Dimensions are mm. over inches

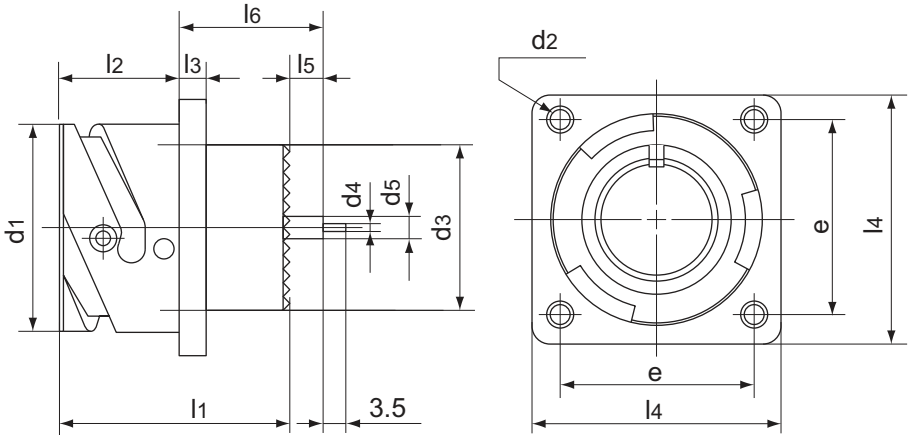
Receptacle with threaded mounting holes. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ | $d_3$ max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 16,2 | 18,2 | 27,9 | 18,2 | 2,8 | 25,4 |
| | 0.72 | | 0.64 | 0.72 | 1.10 | 0.72 | 0.11 | 1.00 |
| 14S | 24,6 | M4 | 19,2 | 23 | 27,9 | 18,2 | 3,2 | 30 |
| | 0.97 | | 0.75 | 0.90 | 1.10 | 0.72 | 0.12 | 1.18 |
| 16S | 27,4 | M4 | 22,4 | 24,6 | 27,9 | 18,2 | 3,2 | 32,5 |
| | 1,08 | | 0.88 | 0.97 | 1.10 | 0.72 | 0.12 | 1.28 |
| 16 | 27,4 | M4 | 22,4 | 24,6 | 34,1 | 23,05 | 3,2 | 32,5 |
| | 1,08 | | 0.88 | 0.97 | 1.34 | 0.91 | 0.12 | 1.28 |
| 18 | 30,8 | M4 | 25,6 | 27 | 34,1 | 23,05 | 4 | 35 |
| | 1.21 | | 1.00 | 1.06 | 1.34 | 0.91 | 0.16 | 1.38 |
| 20 | 34,2 | M4 | 29 | 29,4 | 34,1 | 23,05 | 4 | 38 |
| | 1.35 | | 1.14 | 1.16 | 1.34 | 0.91 | 0.16 | 1.50 |
| 22 | 37,4 | M4 | 32,2 | 31,8 | 34,1 | 23,05 | 4 | 41 |
| | 1.47 | | 1.27 | 1.25 | 1.34 | 0.91 | 0.16 | 1.61 |
| 24 | 40,9 | M4 | 35,3 | 34,9 | 34,1 | 23,05 | 4 | 44,5 |
| | 1.61 | | 1.39 | 1.37 | 1.34 | 0.91 | 0.16 | 1.75 |
| 28 | 46,7 | M5 | 41,4 | 39,7 | 36 | 24,05 | 4 | 50,8 |
| | 1.84 | | 1.63 | 1.56 | 1.42 | 0.95 | 0.16 | 2.00 |
| 32 | 53,4 | M5 | 47,8 | 44,5 | 37,6 | 24,05 | 4 | 57 |
| | 2.10 | | 1.88 | 1.75 | 1.48 | 0.95 | 0.16 | 2.24 |
| 36 | 59,6 | M5 | 54,1 | 49,2 | 37,6 | 24,05 | 4 | 63,5 |
| | 2.35 | | 2.13 | 1.94 | 1.48 | 0.95 | 0.16 | 2.50 |
| 40 | 65,5 | M5 | 59 | 55,5 | 37,6 | 24,05 | 4 | 69,9 |
| | 2.58 | | 2.32 | 2.18 | 1.48 | 0.95 | 0.16 | 2.75 |

Dimensions are mm. over inches

Receptacle with threaded mounting holes and PCB style contacts. For through mounting holes, see page 197.




Connectors are available only with arrangements having contact sizes 16S-16 and 12. For different contact sizes, please consult factory.

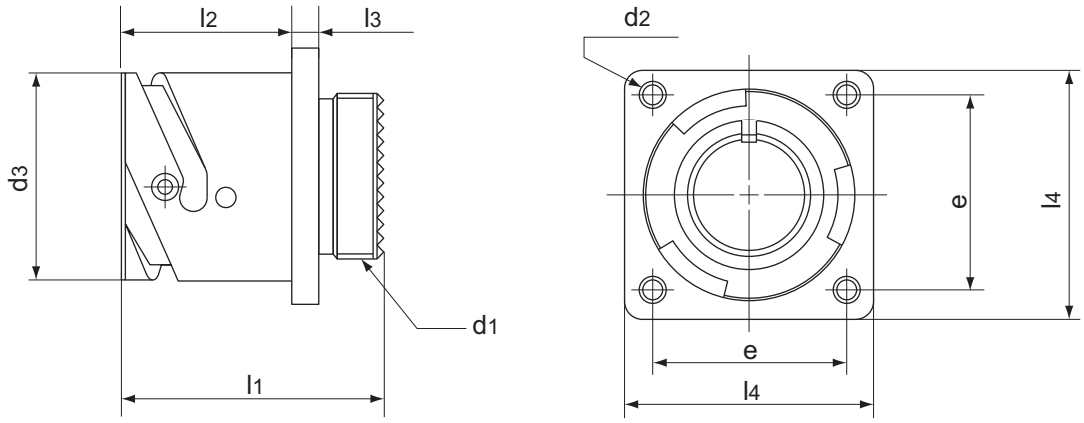
| Available contact | $d_4$ +0 -0,05 | $d_5$ +0 -0,1 |
|---|---|---|
| Size 16S and 16 | 0.75 | 1,6 |
| Size 12 | 1,8 | 3,4 |

| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ max. | e +0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | Type YM $l_5$ | Type YM $l_6$ | Type YM1 $l_5$ | Type YM1 $l_6$ | Type YM2 $l_5$ | Type YM2 $l_6$ | Type YM3 $l_5$ | Type YM3 $l_6$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 16,2 | 18,2 | 27,9 | 18,2 | 2,8 | 25,4 | 5 | 14,4 | 6,6* | 16* | 3,4* | 12,8* | 1,8* | 11,2* |
| | 0.72 | | 0.64 | 0.72 | 1.10 | 0.72 | 0.11 | 1.00 | 0.20 | 0.57 | 0.26 | 0.63 | 0.13 | 0.50 | 0.07 | 0.44 |
| 14S | 24,6 | M4 | 19,2 | 23 | 27,9 | 18,2 | 3,2 | 30 | 5 | 14,4 | 6,6* | 16* | 3,4* | 12,8* | 1,8* | 11,2* |
| | 0.97 | | 0.75 | 0.90 | 1.10 | 0.72 | 0.12 | 1.18 | 0.20 | 0.57 | 0.26 | 0.63 | 0.13 | 0.50 | 0.07 | 0.44 |
| 16S | 27,4 | M4 | 22,4 | 24,6 | 27,9 | 18,2 | 3,2 | 32,5 | 5 | 14,4 | 6.6* | 16* | 3,4* | 12,8* | 1,8* | 11,2* |
| | 1.08 | | 0.88 | 0.97 | 1.10 | 0.72 | 0.12 | 1.28 | 0.20 | 0.57 | 0.26 | 0.63 | 0.13 | 0.50 | 0.07 | 0.44 |
| 16 | 27,4 | M4 | 22,4 | 24,6 | 34,1 | 23,05 | 3,2 | 32,5 | 5 | 15,8 | 6,6 | 17,4 | 3,4* | 14.2* | 1,8 | 12,6 |
| | 1.08 | | 0.88 | 0.97 | 1.34 | 0.91 | 0.12 | 1.28 | 0.20 | 0.62 | 0.26 | 0.68 | 0.13 | 0.56 | 0.07 | 0.50 |
| 18 | 30,8 | M4 | 25,6 | 27 | 34,1 | 23,05 | 4 | 35 | 6,1 | 16,8 | 6,6 | 17,4 | 3,4* | 14.2* | 1,8 | 12,6 |
| | 1.21 | | 1.01 | 1.06 | 1.34 | 0.91 | 0.16 | 1.38 | 0.24 | 0.66 | 0.26 | 0.68 | 0.13 | 0.56 | 0.07 | 0.50 |
| 20 | 34,2 | M4 | 29 | 29,4 | 34,1 | 23,05 | 4 | 38 | 5 | 15,8 | 6,6 | 17,4 | 3,4* | 14.2* | 1,8 | 12,6 |
| | 1.35 | | 1.14 | 1.16 | 1.34 | 0.91 | 0.16 | 1.50 | 0.20 | 0.62 | 0.26 | 0.68 | 0.13 | 0.56 | 0.07 | 0.50 |
| 22 | 37,4 | M4 | 32,2 | 31,8 | 34,1 | 23,05 | 4 | 41 | 5 | 15,8 | 6,6 | 17,4 | 3,4* | 14.2* | 1,8 | 12,6 |
| | 1.47 | | 1.27 | 1.25 | 1.34 | 0.91 | 0.16 | 1.61 | 0.20 | 0.62 | 0.26 | 0.68 | 0.13 | 0.56 | 0.07 | 0.50 |
| 24 | 40,9 | M4 | 35,3 | 34,9 | 34,1 | 23,05 | 4 | 44,5 | 6,9 | 17,6 | 6,6* | 17,4* | 3,4* | 14.2* | 1,8* | 12,6* |
| | 1.61 | | 1.39 | 1.37 | 1.34 | 0.91 | 0.16 | 1.75 | 0.27 | 0.69 | 0.26 | 0.68 | 0.13 | 0.56 | 0.07 | 0.50 |
| 28 | 46,7 | M5 | 41,4 | 39,7 | 36 | 24,05 | 4 | 50,8 | 5 | 16,7 | 6,6* | 18,3* | 3,4 | 15,1 | 1,8* | 13,5* |
| | 1.84 | | 1.63 | 1.56 | 1.42 | 0.95 | 0.16 | 2.00 | 0.20 | 0.66 | 0.26 | 0.72 | 0.13 | 0.59 | 0.07 | 0.53 |
| 32 | 53,4 | M5 | 47,8 | 44,5 | 37,6 | 24,05 | 4 | 57 | 5 | 18,3 | 6,6* | 19,9* | 3,4 | 16,7 | 1,8 | 15,1 |
| | 2.10 | | 1.88 | 1.75 | 1.48 | 0.95 | 0.16 | 2.24 | 0.20 | 0.72 | 0.26 | 0.78 | 0.13 | 0.66 | 0.07 | 0.59 |
| 36 | 59,6 | M5 | 54,1 | 49,2 | 37,6 | 24,05 | 4 | 63,5 | 5 | 18,3 | 6,6* | 19,9* | 3,4 | 16,7 | 1,8 | 15,1 |
| | 2.35 | | 2.13 | 1.94 | 1.48 | 0.95 | 0.16 | 2.50 | 0.20 | 0.72 | 0.26 | 0.78 | 0.13 | 0.66 | 0.07 | 0.59 |
| 40 | 65,5 | M5 | 59 | 55,5 | 37,6 | 24,05 | 4 | 69,9 | 5 | 18,3 | 6,6* | 19,9* | 3,4 | 16,7 | 1,8 | 15,1 |
| | 2.58 | | 2.32 | 2.18 | 1.48 | 0.95 | 0.16 | 2.75 | 0.20 | 0.72 | 0.26 | 0.78 | 0.13 | 0.66 | 0.07 | 0.59 |

* Consult Factory

Dimensions are mm. over inches

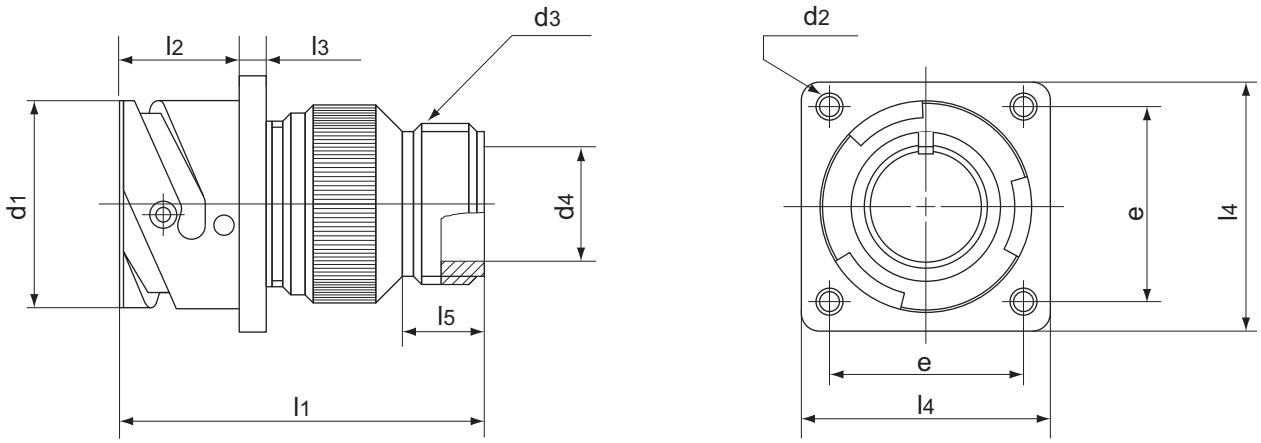
Receptacle with threaded mounting holes and threaded back end. For through mounting holes, see page 197.




| Shell Size | $d_1$ Thread in inches | $d_2$ — | $d_3$ +0 -0,15 | e ±0,1 | $l_1$ ±0,3 | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 5/8-24 UNEF-2A | M4 | 18,2<br>0.72 | 18,2<br>0.72 | 27,6<br>1.09 | 18,2<br>0.72 | 2,8<br>0.11 | 25,4<br>1.00 |
| 14S | 3/4-20 UNEF-2A | M4 | 24,6<br>0.97 | 23<br>0.90 | 27,6<br>1.09 | 18,2<br>0.72 | 3,2<br>0.12 | 30<br>1.18 |
| 16S | 7/8-20 UNEF-2A | M4 | 27,4<br>1.08 | 24,6<br>0.97 | 27,6<br>1.09 | 18,2<br>0.72 | 3,2<br>0.12 | 32,5<br>1.28 |
| 16 | 7/8-20 UNEF-2A | M4 | 27,4<br>1.08 | 24,6<br>0.97 | 33,8<br>1.33 | 23,05<br>0.91 | 3,2<br>0.12 | 32,5<br>1.28 |
| 18 | 1"-20 UNEF-2A | M4 | 30,8<br>1.21 | 27<br>1.06 | 33,8<br>1.33 | 23,05<br>0.90 | 4<br>0.16 | 35<br>1.38 |
| 20 | 1" 1/8-18 UNEF-2A | M4 | 34,2<br>1.35 | 29,4<br>1.16 | 33,8<br>1.33 | 23,05<br>0.91 | 4<br>0.16 | 38<br>1.50 |
| 22 | 1" 1/4-18 UNEF-2A | M4 | 37,4<br>1,47 | 31,8<br>1.25 | 33,8<br>1.33 | 23,05<br>0.91 | 4<br>0.16 | 41<br>1.61 |
| 24 | 1" 3/8-18 UNEF-2A | M4 | 40,9<br>1.61 | 34,9<br>1.37 | 33,8<br>1.33 | 23,05<br>0.91 | 4<br>0.16 | 44,5<br>1.75 |
| 28 | 1" 5/8-18 UNEF-2A | M5 | 46,7<br>1.84 | 39,7<br>1.56 | 35,7<br>1.40 | 24,05<br>0.95 | 4<br>0.16 | 50,8<br>2.00 |
| 32 | 1" 7/8-16 UN-2A | M5 | 53,4<br>2.10 | 44,5<br>1.75 | 37,3<br>1.47 | 24,05<br>0.95 | 4<br>0.16 | 57<br>2.24 |
| 36 | 2" 1/16-16 UN-2A | M5 | 59,6<br>2.35 | 49,2<br>1.94 | 37,3<br>1.47 | 24,05<br>0.95 | 4<br>0.16 | 63,5<br>2.50 |
| 40 | 2" 5/16-16 UN-2A | M5 | 65,5<br>2.58 | 55,5<br>2.18 | 37,2<br>1.46 | 24,05<br>0.95 | 4<br>0.16 | 69,9<br>2.75 |

Dimensions are mm. over inches

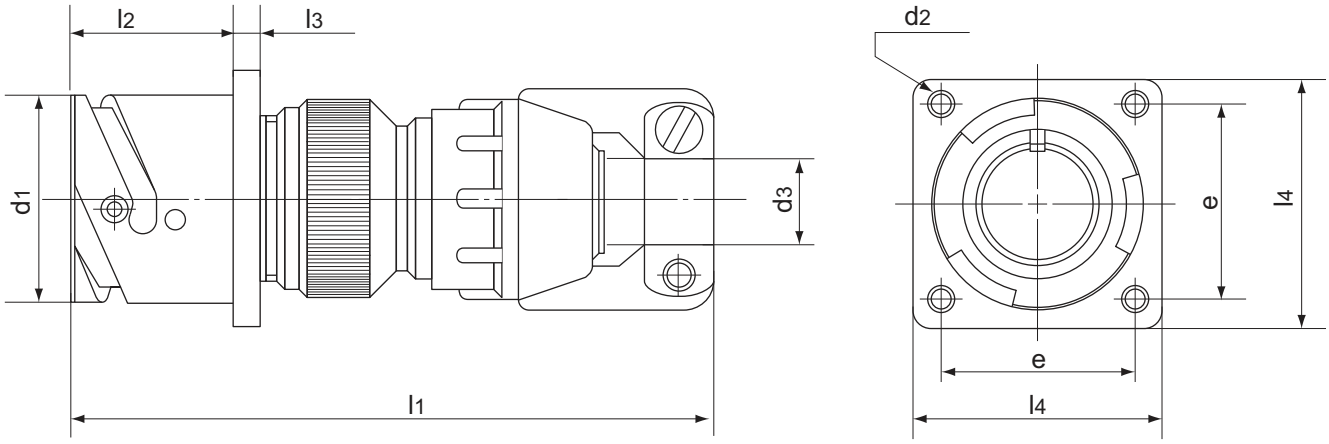
Receptacle with threaded mounting holes and backshell. R type has an individual wire sealing grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ | $d_3$ Thread in inches | $d_4$ +0,1 -0 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 5/8-24 UNEF-2A | 10,4 | 18,2 | 46 | 18,2 | 2,8 | 25,4 | 9,5 |
| | 0.72 | | | 0.41 | 0.72 | 1.81 | 0.72 | 0.11 | 1.00 | 0.37 |
| 14S | 24,6 | M4 | 3/4-20 UNEF-2A | 13,2 | 23 | 50 | 18,2 | 3,2 | 30 | 9,5 |
| | 0.97 | | | 0.52 | 0.90 | 2.00 | 0.72 | 0.13 | 1.18 | 0.37 |
| 16S | 27,4 | M4 | 7/8-20 UNEF-2A | 16,2 | 24,6 | 50 | 18,2 | 3,2 | 32,5 | 9,5 |
| | 1.08 | | | 0.64 | 0.97 | 2.00 | 0.72 | 0.13 | 1.28 | 0.37 |
| 16 | 27,4 | M4 | 7/8-20 UNEF-2A | 16,2 | 24,6 | 58 | 23.05 | 3,2 | 32,5 | 9,5 |
| | 1.08 | | | 0.64 | 0.97 | 2.28 | 0.91 | 0.13 | 1.28 | 0.37 |
| 18 | 30,8 | M4 | 1"-20 UNEF-2A | 19,2 | 27 | 58 | 23.05 | 4 | 35 | 9,5 |
| | 1.21 | | | 0.75 | 1.06 | 2.28 | 0.91 | 0.16 | 1.38 | 0.37 |
| 20 | 34,2 | M4 | 1"3/16-18 UNEF-2A | 22 | 29,4 | 58 | 23.05 | 4 | 38 | 9,5 |
| | 1.35 | | | 0.87 | 1.16 | 2.28 | 0.91 | 0.16 | 1.50 | 0.37 |
| 22 | 37,4 | M4 | 1"3/16-18 UNEF-2A | 24,5 | 31,8 | 59 | 23.05 | 4 | 41 | 9,5 |
| | 1.47 | | | 0.96 | 1.25 | 2.32 | 0.91 | 0.16 | 1.61 | 0.37 |
| 24 | 40,9 | M4 | 1"7/16-18 UNEF-2A | 27,8 | 34,9 | 59 | 23.05 | 4 | 44,5 | 9,5 |
| | 1.61 | | | 1.109 | 1.37 | 2.32 | 0.91 | 0.16 | 1.75 | 0.37 |
| 28 | 46,7 | M5 | 1"7/16-18 UNEF-2A | 31,2 | 39,7 | 67 | 24,05 | 4 | 50,8 | 9,5 |
| | 1.84 | | | 1.23 | 1.56 | 2.64 | 0.95 | 0.16 | 2.00 | 0.37 |
| 32 | 53,4 | M5 | 1"3/4-18 UNS-2A | 37,8 | 44,5 | 71 | 24,05 | 4 | 57 | 11 |
| | 2.10 | | | 1.49 | 1.75 | 2.79 | 0.95 | 0.16 | 2.24 | 0.43 |
| 36 | 59,6 | M5 | 2"-18 UNS-2A | 45 | 49,2 | 71 | 24,05 | 4 | 63,5 | 11,8 |
| | 2.35 | | | 1.77 | 1.94 | 2.79 | 0.95 | 0.16 | 2.50 | 0.46 |
| 40 | 65,5 | M5 | 2"1/4-16 UN-2A | 51,2 | 55,5 | 86 | 24,05 | 4 | 69,9 | 11,8 |
| | 2.58 | | | 2.01 | 2.18 | 3.38 | 0.95 | 0.16 | 2.75 | 0.46 |

Dimensions are mm. over inches

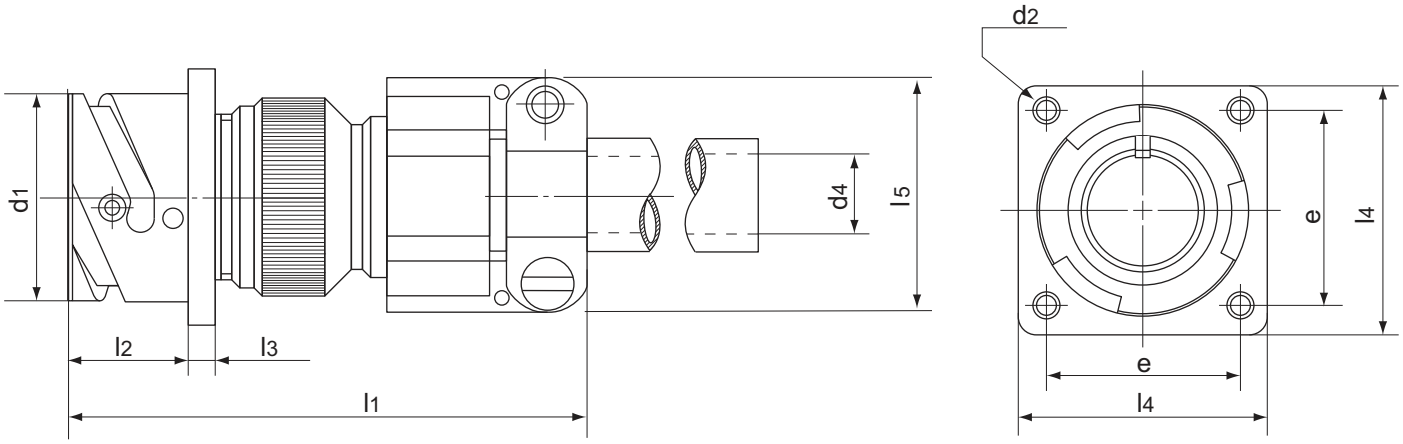
Receptacle with threaded mounting holes and a cable clamp for jacketed cables. CFZ type also has an individual wire sealing grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ open | $d_3$ closed | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 7,93 | 2,38 | 18,2 | 76 | 18,2 | 2,8 | 25,4 |
| | 0.72 | | .312 | .094 | 0.72 | 2.99 | 0.72 | 0.11 | 1.00 |
| 14S | 24,6 | M4 | 11,12 | 6,35 | 23 | 80 | 18,2 | 3,2 | 30 |
| | 0.97 | | .438 | .25 | 0.90 | 3.15 | 0.72 | 0.12 | 1.18 |
| 16S | 27,4 | M4 | 13,48 | 8,0 | 24,6 | 80 | 18,2 | 3,2 | 32,5 |
| | 1.08 | | .531 | .315 | 0.97 | 3.15 | 0.72 | 0.12 | 1.28 |
| 16 | 27,4 | M4 | 13,48 | 8,0 | 24,6 | 88 | 23,05 | 3,2 | 32,5 |
| | 1.08 | | .531 | .315 | 0.97 | 3.46 | 0.91 | 0.12 | 1.28 |
| 18 | 30,8 | M4 | 15,87 | 9,6 | 27 | 91 | 23,05 | 4 | 35 |
| | 1.21 | | .625 | .375 | 1.06 | 3.58 | 0.91 | 0.16 | 1.38 |
| 20 | 34,2 | M4 | 19,0 | 11,3 | 29,4 | 91 | 23,05 | 4 | 38 |
| | 1.35 | | .748 | .445 | 1.16 | 3.58 | 0.91 | 0.16 | 1.50 |
| 22 | 37,4 | M4 | 19,0 | 11,3 | 31,8 | 92 | 23,05 | 4 | 41 |
| | 1.47 | | .748 | .445 | 1.25 | 3.62 | 0.91 | 0.16 | 1.61 |
| 24 | 40,9 | M4 | 23,8 | 15,5 | 34,9 | 95 | 23,05 | 4 | 44,5 |
| | 1.61 | | .938 | .610 | 1.37 | 3.74 | 0.91 | 0.16 | 1.75 |
| 28 | 46,7 | M5 | 23,8 | 15,5 | 39,7 | 103 | 24,05 | 4 | 50,8 |
| | 1.84 | | .938 | .610 | 1.56 | 4.05 | 0.95 | 0.16 | 2.00 |
| 32 | 53,4 | M5 | 31,75 | 23,4 | 44,5 | 113 | 24,05 | 4 | 57 |
| | 2.10 | | 1.25 | .921 | 1.75 | 4.45 | 0.95 | 0.16 | 2.24 |
| 36 | 59,6 | M5 | 35,0 | 23,4 | 49,2 | 120 | 24,05 | 4 | 63,5 |
| | 2.35 | | 1.378 | .921 | 1.94 | 4.72 | 0.95 | 0.16 | 2.50 |
| 40 | 65,5 | M5 | 41,25 | 29,9 | 55,5 | 135 | 24,05 | 4 | 69,9 |
| | 2.58 | | 1.625 | 1.177 | 2.18 | 5.31 | 0.95 | 0.16 | 2.75 |

Dimensions are mm. over inches

Receptacle with threaded mounting holes, individual wire sealing grommet and cable-clamp with bushing. AF type has no grommet. For through mounting holes, see page 197.

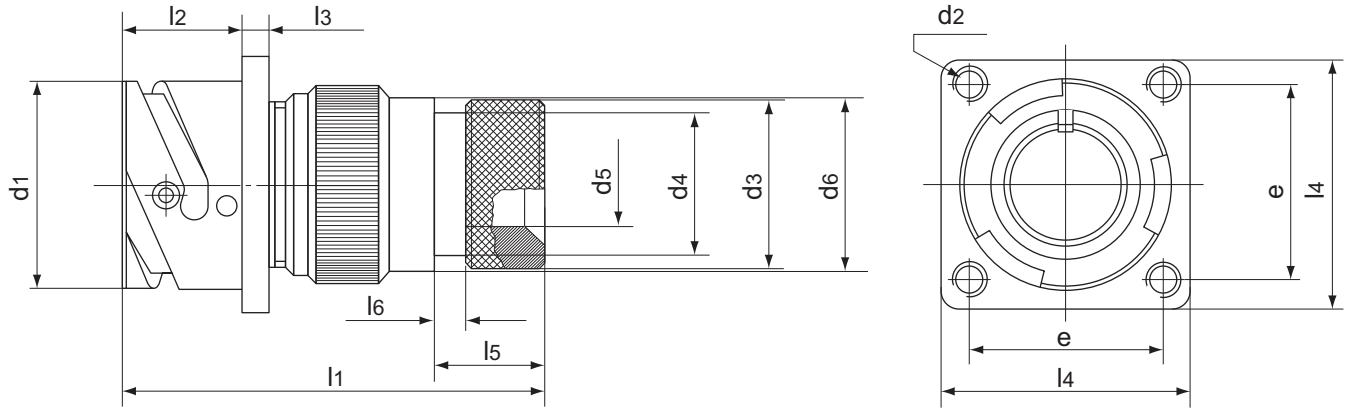



| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ * max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ max. |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 5,6 | 18,2 | 67 | 18,2 | 2,8 | 25,4 | 22,7 |
| | 0.72 | | 0.22 | 0.72 | 2.64 | 0.72 | 0.11 | 1.00 | 0.89 |
| 14S | 24,6 | M4 | 7,9 | 23 | 72 | 18,2 | 3,2 | 30 | 27,5 |
| | 0.97 | | 0.31 | 0.90 | 2.83 | 0.72 | 0.12 | 1.18 | 1.08 |
| 16S | 27,4 | M4 | 11 | 24,6 | 75 | 18,2 | 3,2 | 32,5 | 30 |
| | 1,08 | | 0.43 | 0.97 | 2.95 | 0.72 | 0.12 | 1.28 | 1.18 |
| 16 | 27,4 | M4 | 11 | 24,6 | 82 | 23,05 | 3,2 | 32,5 | 30 |
| | 1,08 | | 0.43 | 0.97 | 3.23 | 0.91 | 0.12 | 1.28 | 1.18 |
| 18 | 30,8 | M4 | 14,2 | 27 | 82 | 23,05 | 4 | 35 | 32,2 |
| | 1.21 | | 0.56 | 1.06 | 3.23 | 0.91 | 0.16 | 1.38 | 1.27 |
| 20 | 34,2 | M4 | 15,8 | 29,4 | 82 | 23,05 | 4 | 38 | 37,5 |
| | 1.35 | | 0.62 | 1.16 | 3.23 | 0.91 | 0.16 | 1.50 | 1.48 |
| 22 | 37,4 | M4 | 15,8 | 31,8 | 83 | 23,05 | 4 | 41 | 37,5 |
| | 1.47 | | 0.62 | 1.25 | 3.27 | 0.91 | 0.16 | 1.61 | 1.48 |
| 24 | 40,9 | M4 | 19 | 34,9 | 85 | 23,05 | 4 | 44,5 | 43,3 |
| | 1.61 | | 0.75 | 1.37 | 3.35 | 0.91 | 0.16 | 1.75 | 1.70 |
| 28 | 46,7 | M5 | 19 | 39,7 | 93 | 24,05 | 4 | 50,8 | 43,3 |
| | 1.84 | | 0.75 | 1.56 | 3.66 | 0.95 | 0.16 | 2.00 | 1.70 |
| 32 | 53,4 | M5 | 23,8 | 44,5 | 99 | 24,05 | 4 | 57 | 51,7 |
| | 2.10 | | 0.94 | 1.75 | 3.90 | 0.95 | 0.16 | 2.24 | 2.03 |
| 36 | 59,6 | M5 | 31,7 | 49,2 | 100 | 24,05 | 4 | 63,5 | 58 |
| | 2.35 | | 1.25 | 1.94 | 3.94 | 0.95 | 0.16 | 2.50 | 2.28 |
| 40 | 65,5 | M5 | 34,9 | 55,5 | 128 | 24,05 | 4 | 69,9 | 68.5 |
| | 2.58 | | 1.37 | 2.18 | 5.04 | 0.95 | 0.16 | 2.75 | 2.70 |

* Max. permissible outside diameter of cable.

Dimensions are mm. over inches

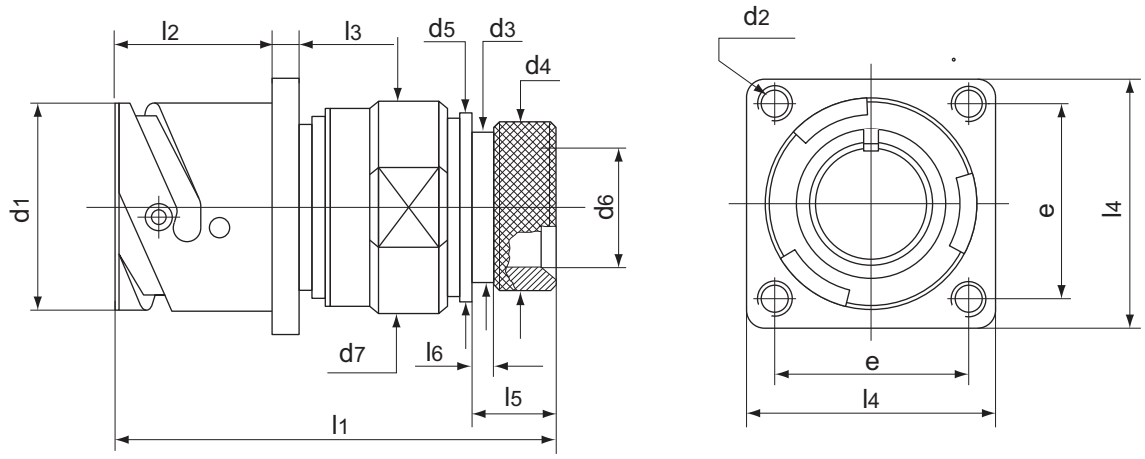
Receptacle with threaded mounting holes, individual wire sealing grommet and backshell for heat shrinkable tubing. AG type has no grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ ±0,2 | $d_4$ max. | $d_5$ ±0,1 | $d_6$ ±0,2 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 15,5 | 13,3 | 7,9 | 17 | 18,2 | 50 | 18,2 | 2,8 | 25,4 | 11,7 | 3,5 |
| | 0.72 | | 0.61 | 0.52 | 0.31 | 0.67 | 0.72 | 1.97 | 0.72 | 0.11 | 1.00 | 0.46 | 0.14 |
| 14S | 24,6 | M4 | 19,1 | 17 | 10,8 | 20,1 | 23 | 50 | 18,2 | 3,2 | 30 | 11,7 | 3,5 |
| | 0.97 | | 0.75 | 0.67 | 0.42 | 0.79 | 0.90 | 1.97 | 0.72 | 0.12 | 1.18 | 0.46 | 0.14 |
| 16S | 27,4 | M4 | 23,9 | 21,9 | 13,7 | 23,5 | 24,6 | 50 | 18,2 | 3,2 | 32,5 | 11,7 | 3,5 |
| | 1.08 | | 0.94 | 0.86 | 0.54 | 0.92 | 0.97 | 1.97 | 0.72 | 0.12 | 1.28 | 0.46 | 0.14 |
| 16 | 27,4 | M4 | 23,9 | 21,9 | 13,7 | 23,5 | 24,6 | 60 | 23,5 | 3,2 | 32,5 | 11,5 | 3,5 |
| | 1.08 | | 0.94 | 0.86 | 0.54 | 0.92 | 0.97 | 2.36 | 0.92 | 0.12 | 1.28 | 0.45 | 0.14 |
| 18 | 30,8 | M4 | 23,9 | 21,9 | 14,8 | 26,5 | 27 | 60 | 23,5 | 4 | 35 | 11,5 | 3,5 |
| | 1.21 | | 0.94 | 0.86 | 0.58 | 1.04 | 1.06 | 2.36 | 0.92 | 0.16 | 1.38 | 0.45 | 0.14 |
| 20 | 34,2 | M4 | 29,6 | 26,2 | 18,9 | 30,2 | 29,4 | 65 | 23,5 | 4 | 38 | 12,4 | 3,5 |
| | 1.35 | | 1.16 | 1.03 | 0.74 | 1.19 | 1.16 | 2.56 | 0.92 | 0.16 | 1.50 | 0.49 | 0.14 |
| 22 | 37,4 | M4 | 29,6 | 26,2 | 21 | 33,6 | 31,8 | 65 | 23,5 | 4 | 41 | 12,4 | 3,5 |
| | 1.47 | | 1.16 | 1.03 | 0.83 | 1.32 | 1.25 | 2.56 | 0.92 | 0.16 | 1.61 | 0.49 | 0.14 |
| 24 | 40,9 | M4 | 37,8 | 34,5 | 24,8 | 36,1 | 34,9 | 65 | 23,5 | 4 | 44,5 | 12,7 | 3,5 |
| | 1.61 | | 1.49 | 1.36 | 0.98 | 1.42 | 1.37 | 2.56 | 0.92 | 0.16 | 1.75 | 0.50 | 0.14 |
| 28 | 46,7 | M5 | 37,8 | 34,5 | 27,2 | 41,4 | 39,7 | 65 | 24,05 | 4 | 50,8 | 12,7 | 3,5 |
| | 1.84 | | 1.49 | 1.36 | 1.07 | 1.63 | 1.56 | 2.56 | 0.95 | 0.16 | 2.00 | 0.50 | 0.14 |
| 32 | 53,4 | M5 | 47,8 | 43,6 | 33,5 | 48,6 | 44,5 | 70 | 24,05 | 4 | 57 | 15,2 | 3,5 |
| | 2.10 | | 1.88 | 1.72 | 1.32 | 1.91 | 1.75 | 2.75 | 0.95 | 0.16 | 2.24 | 0.60 | 0.14 |
| 36 | 59,6 | M5 | 47,8 | 43,6 | 38,7 | 54,8 | 49,2 | 75 | 24,05 | 4 | 63,5 | 15,2 | 3,5 |
| | 2.35 | | 1.88 | 1.72 | 1.52 | 2.16 | 1.94 | 2.95 | 0.95 | 0.16 | 2.50 | 0.60 | 0.14 |
| 40 | 65,5 | M5 | 57,8 | 52,6 | 48,2 | 60,9 | 55,5 | 77 | 24,05 | 4 | 69,9 | 15,2 | 3,5 |
| | 2.58 | | 2.27 | 2.07 | 1.90 | 2.40 | 2.18 | 3.03 | 0.95 | 0.16 | 2.75 | 0.60 | 0.14 |

Dimensions are mm. over inches

Receptacle with threaded mounting holes, individual wire sealing grommet and a two piece swivel backshell for heat shrinkable tubing. For through mounting holes, see page 197. AG2 type has no wire sealing grommet.

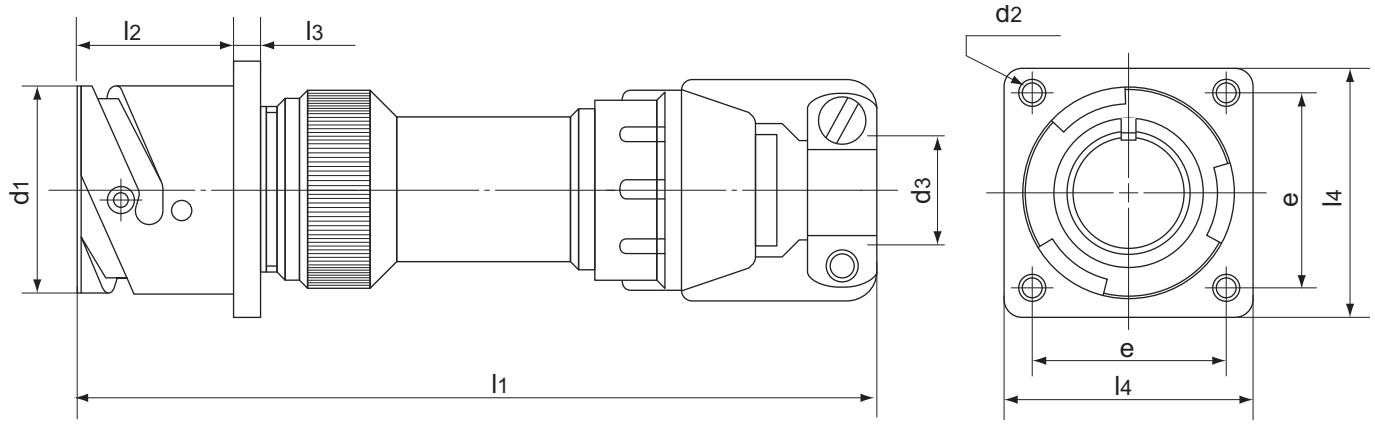



| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ ±0,1 | $d_4$ — | $d_5$ ±0,1 | $d_6$ ±0,1 | $d_7$ max. | e ±0,1 | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ ±0,1 | $l_6$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 13 | 15,5 | 17 | 8,6 | 22 | 18,2 | 51,9 | 18,2 | 2,8 | 25,4 | 11,7 | 3,5 |
| | 0.72 | | 0.51 | 0.61 | 0.67 | 0.34 | 0.87 | 0.72 | 2.04 | 0.72 | 0.11 | 1.00 | 0.46 | 0.14 |
| 14S | 24,6 | M4 | 16,8 | 19,1 | 20,1 | 11,2 | 25 | 23 | 51,9 | 18,2 | 3,2 | 30 | 11,7 | 3,5 |
| | 0.97 | | 0.66 | 0.75 | 0.79 | 0.44 | 0.98 | 0.90 | 2.04 | 0.72 | 0.12 | 1.18 | 0.46 | 0.14 |
| 16S | 27,4 | M4 | 21,7 | 23,9 | 23,5 | 14 | 28 | 24,6 | 52,7 | 18,2 | 3,2 | 32,5 | 11,7 | 3,5 |
| | 1.08 | | 0.85 | 0.94 | 0.92 | 0.55 | 1.10 | 0.97 | 2.07 | 0.72 | 0.12 | 1.28 | 0.46 | 0.14 |
| 16 | 27,4 | M4 | 21,7 | 23,9 | 23,5 | 14 | 28 | 24,6 | 59,3 | 23,05 | 3,2 | 32,5 | 11,5 | 3,5 |
| | 1.08 | | 0.85 | 0.94 | 0.92 | 0.55 | 1.10 | 0.97 | 2.33 | 0.91 | 0.12 | 1.28 | 0.45 | 0.14 |
| 18 | 30,8 | M4 | 21,7 | 23,9 | 26,5 | 16,4 | 31 | 27 | 58,8 | 23,05 | 4 | 35 | 11,5 | 3,5 |
| | 1.12 | | 0.85 | 0.94 | 1.04 | 0.64 | 1.22 | 1.06 | 2.31 | 0.91 | 0.16 | 1.38 | 0.45 | 0.14 |
| 20 | 34,2 | M4 | 26,1 | 29,6 | 30,2 | 19,3 | 35 | 29,4 | 59,5 | 23,05 | 4 | 38 | 12,4 | 3,5 |
| | 1.35 | | 1.03 | 1.16 | 1.19 | 0.76 | 1.38 | 1.16 | 2.34 | 0.91 | 0.16 | 1.50 | 0.49 | 0.14 |
| 22 | 37,4 | M4 | 26,1 | 29,6 | 33,6 | 22 | 38 | 31,8 | 59,5 | 23,05 | 4 | 41 | 12,4 | 3,5 |
| | 1.47 | | 1.03 | 1.16 | 1.32 | 0.87 | 1.50 | 1.25 | 2.34 | 0.91 | 0.16 | 1.61 | 0.49 | 0.14 |
| 24 | 40,9 | M4 | 34,3 | 37,8 | 36,1 | 25 | 41 | 34,9 | 60,2 | 23,05 | 4 | 44,5 | 12,7 | 3,5 |
| | 1.61 | | 1.35 | 1.49 | 1.42 | 0.98 | 1.61 | 1.37 | 2.37 | 0.91 | 0.16 | 1.75 | 0.50 | 0.14 |
| 28 | 46,7 | M5 | 34,3 | 37,8 | 41,4 | 28 | 48 | 39,7 | 63,9 | 24,05 | 4 | 50,8 | 12,7 | 3,5 |
| | 1.84 | | 1.35 | 1.49 | 1.63 | 1.10 | 1.89 | 1.56 | 2.51 | 0.95 | 0.16 | 2.00 | 0.50 | 0.14 |
| 32 | 53,4 | M5 | 43,4 | 47,8 | 48,6 | 34,8 | 54 | 44,5 | 66,2 | 24,05 | 4 | 57 | 15,2 | 3,5 |
| | 2.10 | | 1.71 | 1.88 | 1.91 | 1.37 | 2.12 | 1.75 | 2.61 | 0.95 | 0.16 | 2.24 | 0.60 | 0.14 |
| 36 | 59,6 | M5 | 43,4 | 47,8 | 54,8 | 38,7 | 61 | 49,2 | 66,2 | 24,05 | 4 | 63,5 | 15,2 | 3,5 |
| | 2.35 | | 1.71 | 1.88 | 2.16 | 1.52 | 2.40 | 1.94 | 2.61 | 0.95 | 0.16 | 2.50 | 0.60 | 0.14 |
| 40 | 65,5 | M5 | 52,6 | 57,8 | 61 | 48,2 | 68 | 55,5 | 66,5 | 24,05 | 4 | 69,9 | 15,5 | 3,5 |
| | 2.58 | | 2.07 | 2.27 | 2.40 | 1.90 | 2.68 | 2.18 | 2.62 | 0.95 | 0.16 | 2.75 | 0.61 | 0.14 |

* Nominal dimension with tightened backshell.

Dimensions are mm. over inches

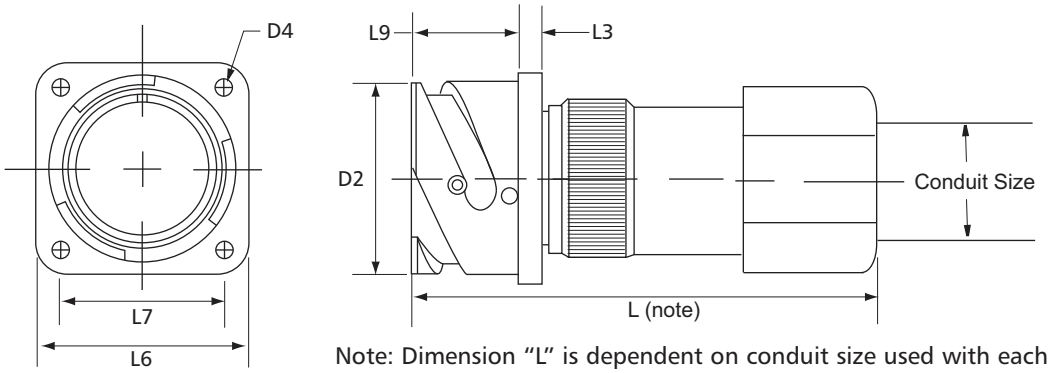
Receptacle with threaded mounting holes, long backshell and a cable clamp for jacketed cables. CFZ type also has an individual wire sealing grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ open | $d_3$ closed | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 7,93 | 2,38 | 18,2 | 104 | 18,2 | 2,8 | 25,4 |
| | 0.72 | | .312 | .094 | 0.72 | 4.09 | 0.72 | 0.11 | 1.0 |
| 14S | 24,6 | M4 | 11,12 | 6,35 | 23 | 104 | 18,2 | 3,2 | 30 |
| | 0.97 | | .438 | .25 | 0.90 | 4.09 | 0.72 | 0.12 | 1.18 |
| 16S | 27,4 | M4 | 13,48 | 8,0 | 24,6 | 104 | 18,2 | 3,2 | 32,5 |
| | 1.08 | | .531 | .315 | 0.97 | 4.09 | 0.72 | 0.12 | 1.28 |
| 16 | 27,4 | M4 | 13,48 | 8,0 | 24,6 | 114 | 23,05 | 3,2 | 32,5 |
| | 1.08 | | .531 | .315 | 0.97 | 4.49 | 0.91 | 0.12 | 1.28 |
| 18 | 30,8 | M4 | 15,87 | 9,6 | 27 | 119 | 23,05 | 4 | 35 |
| | 1.21 | | .625 | .378 | 1.06 | 4.68 | 0.91 | 0.16 | 1.38 |
| 20 | 34,2 | M4 | 19,0 | 11,3 | 29,4 | 119 | 23,05 | 4 | 38 |
| | 1.35 | | .748 | .445 | 1.16 | 4.68 | 0.91 | 0.16 | 1.50 |
| 22 | 37,4 | M4 | 19,0 | 11,3 | 31,8 | 119 | 23,05 | 4 | 41 |
| | 1.47 | | .748 | .445 | 1.25 | 4.68 | 0.91 | 0.16 | 1.61 |
| 24 | 40,9 | M4 | 23,8 | 15,5 | 34,9 | 122 | 23,05 | 4 | 44,5 |
| | 1.61 | | .938 | .610 | 1.37 | 4.80 | 0.91 | 0.16 | 1.75 |
| 28 | 46,7 | M5 | 23,8 | 15,5 | 39,7 | 130 | 24,05 | 4 | 50,8 |
| | 1.84 | | .938 | .610 | 1.56 | 5.12 | 0.95 | 0.16 | 2.00 |
| 32 | 53,4 | M5 | 31,75 | 23,4 | 44,5 | 137 | 24,05 | 4 | 57 |
| | 2.10 | | 1.250 | .921 | 1.75 | 5.39 | 0.95 | 0.16 | 2.24 |
| 36 | 59,6 | M5 | 35,0 | 23,4 | 49,2 | 144 | 24,05 | 4 | 63,5 |
| | 2.35 | | 1.378 | .921 | 1.94 | 5.67 | 0.95 | 0.16 | 2.50 |
| 40 | 65,5 | M5 | 41,25 | 29,9 | 55,5 | 144 | 24,05 | 4 | 69,9 |
| | 2.58 | | 1.625 | 1.177 | 2.18 | 5.67 | 0.95 | 0.16 | 2.75 |

Dimensions are mm. over inches

Receptacle with threaded mounting holes for terminating conduit. Straight long RK backshell with adapter and backnut assembly to seal and grip on the jacket of a steel core flexible *EF type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. ARK same as RK but without a grommet or compression ring.



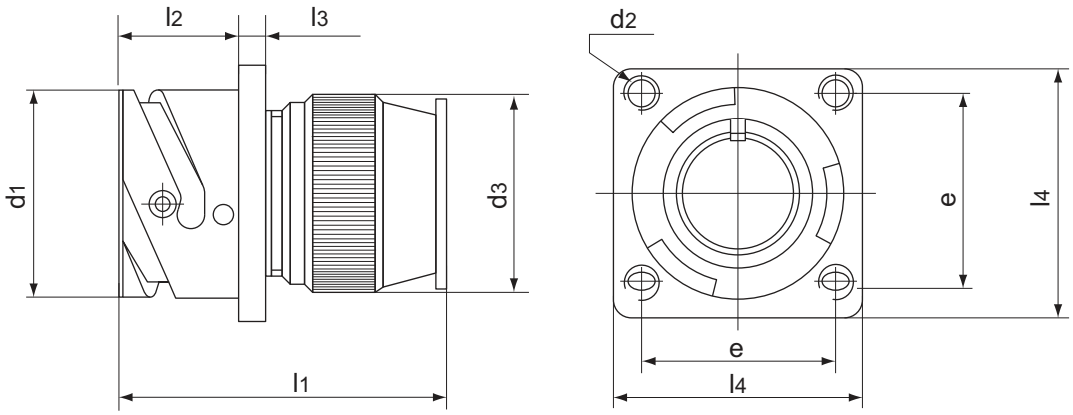

Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | $D_2$ Max. | $D_4$ +/- 0,1 .004 | $L_1$ 0,2 .008 | $L_3$ +/- 0,2 .008 | $L_6$+/- 0,4 .016 | $L_7$ +/- 0,2 .008 | $L_9$ + 0,2 .008 |
|---|---|---|---|---|---|---|---|
| 10SL | 18,2<br>.72 | 3,2<br>.126 | 18,2<br>.717 | 2,8<br>.110 | 25,4<br>1.00 | 18,2<br>.717 | 18,2<br>.717 |
| 14S | 24,6<br>.97 | 3,2<br>.126 | 24,6<br>.969 | 3,2<br>.126 | 30,0<br>1.181 | 23,0<br>.906 | 18,2<br>.717 |
| 16S | 27,4<br>1.08 | 3,2<br>.126 | 27,4<br>1.079 | 3,2<br>.126 | 32,5<br>1.280 | 24,6<br>.969 | 18,2<br>.717 |
| 16 | 27,4<br>1.08 | 3,2<br>.126 | 27,4<br>1.079 | 3,2<br>.126 | 32,5<br>1.280 | 24,6<br>.969 | 23,1<br>.909 |
| 18 | 30,8<br>1.21 | 3,2<br>.126 | 30,8<br>1.213 | 4,0<br>.157 | 35,0<br>1.378 | 27,0<br>1.063 | 23,1<br>.909 |
| 20 | 34,2<br>1.35 | 3,2<br>.126 | 34,2<br>1.346 | 4,0<br>.157 | 38,0<br>1.496 | 29,4<br>1.157 | 23,1<br>.909 |
| 22 | 37,4<br>1.47 | 3,2<br>.126 | 37,4<br>1.472 | 4,0<br>.157 | 41,0<br>1.614 | 31,8<br>1.252 | 23,1<br>.909 |
| 24 | 40,9<br>1.61 | 3,7<br>.146 | 40,9<br>1.610 | 4,0<br>.157 | 44,5<br>1.752 | 34,9<br>1.374 | 23,1<br>.909 |
| 28 | 46,7<br>1.84 | 3,7<br>.146 | 46,7<br>1.839 | 4,0<br>.157 | 50,8<br>2.000 | 39,7<br>1.563 | 24,1<br>.949 |
| 32 | 53,4<br>2.10 | 4,3<br>.169 | 53,4<br>2.102 | 4,0<br>.157 | 57,0<br>2.244 | 44,5<br>1.752 | 24,1<br>.949 |
| 36 | 59,6<br>2.35 | 4,3<br>.169 | 59,6<br>2.346 | 4,0<br>.157 | 63,5<br>2.500 | 49,2<br>1.937 | 24,1<br>.949 |
| 40 | 65.5<br>2.58 | 4,3<br>.169 | 65,5<br>2.579 | 4,0<br>.157 | 69,9<br>2.752 | 55,5<br>2.185 | 24,1<br>.949 |

| Conduit (EF Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Dimensions are mm. over inches

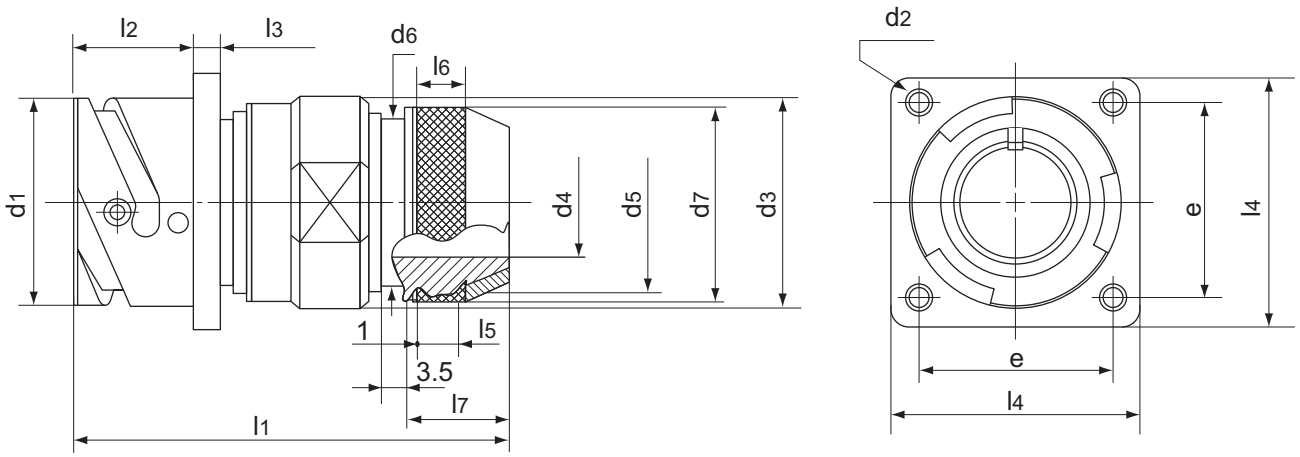
Receptacle with threaded mounting holes and an individual wire sealing grommet. For through mounting holes, see page 197. ARV type has no wire sealing grommet.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 20 | 18,2 | 43 | 18,2 | 2,8 | 25,4 |
| | 0.72 | | 0.79 | 0.72 | 1.69 | 0.72 | 0.11 | 1.00 |
| 14S | 24,6 | M4 | 24 | 23 | 43 | 18,2 | 3,2 | 30 |
| | 0.97 | | 0.94 | 0.90 | 1.69 | 0.72 | 0.12 | 1.18 |
| 16S | 27,4 | M4 | 26 | 24,6 | 43 | 18,2 | 3,2 | 32,5 |
| | 1,08 | | 1.02 | 0.97 | 1.69 | 0.72 | 0.12 | 1.28 |
| 16 | 27,4 | M4 | 26 | 24,6 | 56 | 23,05 | 3,2 | 32,5 |
| | 1,08 | | 1.02 | 0.97 | 2.20 | 0.91 | 0.12 | 1.28 |
| 18 | 30,8 | M4 | 29,5 | 27 | 56 | 23,05 | 4 | 35 |
| | 1.21 | | 1.16 | 1.06 | 2.20 | 0.91 | 0.16 | 1.38 |
| 20 | 34,2 | M4 | 33 | 29,4 | 57 | 23,05 | 4 | 38 |
| | 1.35 | | 1.30 | 1.16 | 2.24 | 0.91 | 0.16 | 1.50 |
| 22 | 37,4 | M4 | 36 | 31,8 | 57 | 23,05 | 4 | 41 |
| | 1.47 | | 1.42 | 1.25 | 2.24 | 0.91 | 0.16 | 1.61 |
| 24 | 40,9 | M4 | 40 | 34,9 | 57 | 23,05 | 4 | 44,5 |
| | 1.61 | | 1.57 | 1.37 | 2.24 | 0.91 | 0.16 | 1.75 |
| 28 | 46,7 | M5 | 46 | 39,7 | 59 | 24,05 | 4 | 50,8 |
| | 1.84 | | 1.81 | 1.56 | 2.32 | 0.95 | 0.16 | 2.00 |
| 32 | 53,4 | M5 | 51,5 | 44,5 | 60 | 24,05 | 4 | 57 |
| | 2.10 | | 2.03 | 1.75 | 2.36 | 0.95 | 0.16 | 2.24 |
| 36 | 59,6 | M5 | 58 | 49,2 | 60 | 24,05 | 4 | 63,5 |
| | 2.35 | | 2.28 | 1.94 | 2.36 | 0.95 | 0.16 | 2.50 |
| 40 | 65,5 | M5 | 64,5 | 55,5 | 61 | 24,05 | 4 | 69,9 |
| | 2.58 | | 2.54 | 2.18 | 2.40 | 0.95 | 0.16 | 2.75 |

Dimensions are mm. over inches

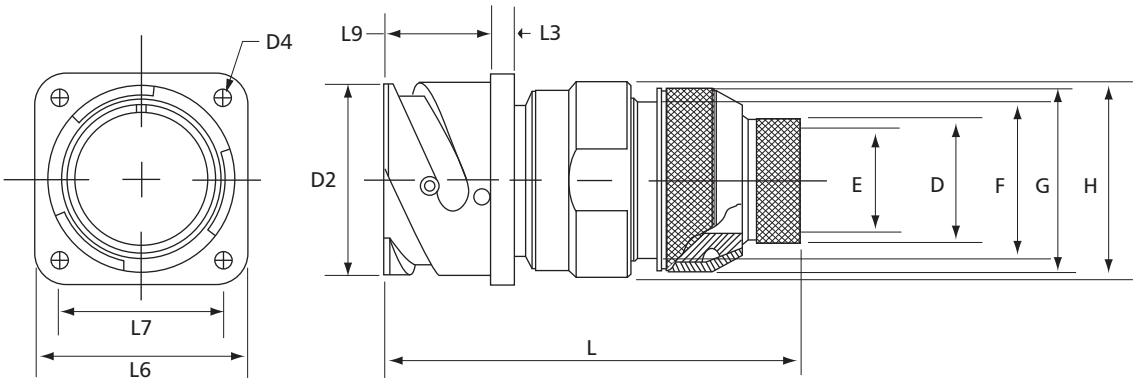
Receptacle with threaded mounting holes and an individual wire sealing grommet. Includes a special backshell for shield braid termination (for shielding characteristics, see page 12) To be used with heat shrinkable tubing. For through mounting holes, see page 197. ASB type has no wire sealing grommet.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ max. | $d_4$ min. | $d_5$ Thread | $d_6$ max. | $d_7$ +0,5 -0 | e ±0,1 | $l_1$ * ~ | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. | $l_6$ ±0,5 | $l_7$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 22 | 8,6 | M16x1 | 16,3 | 18,5 | 18,2 | 55 | 18,2 | 2,8 | 25,4 | 4,5 | 5,5 | 17 |
| | 0.72 | | 0.87 | 0.34 | | 0.64 | 0.73 | 0.72 | 2.16 | 0.72 | 0.11 | 1.00 | 0.18 | 0.22 | 0.67 |
| 14S | 24,6 | M4 | 25 | 10,6 | M20x1 | 20 | 22 | 23 | 55 | 18,2 | 3,2 | 30 | 5 | 7 | 17 |
| | 0.97 | | 0.98 | 0.42 | | 0.79 | 0.87 | 0.90 | 2.16 | 0.72 | 0.12 | 1.18 | 0.20 | 0.27 | 0.67 |
| 16S | 27,4 | M4 | 28 | 13,5 | M23x1 | 23 | 25 | 24.6 | 57 | 18,2 | 3,2 | 32,5 | 6 | 8 | 18,5 |
| | 1.08 | | 1.10 | 0.53 | | 0.90 | 0.98 | 0.97 | 2.24 | 0.72 | 0.12 | 1.28 | 0.24 | 0.31 | 0.73 |
| 16 | 27,4 | M4 | 28 | 13,5 | M23x1 | 23 | 25 | 24.6 | 62,5 | 23,05 | 3,2 | 32,5 | 6 | 8 | 18,5 |
| | 1.08 | | 1.10 | 0.53 | | 0.90 | 0.98 | 0.97 | 2.46 | 0.91 | 0.12 | 1.28 | 0.24 | 0.31 | 0.73 |
| 18 | 30,8 | M4 | 31 | 14,6 | M26x1 | 24,5 | 28 | 27 | 63,7 | 23,05 | 4 | 35 | 6 | 8 | 18,5 |
| | 1.21 | | 1.22 | 0.57 | | 0.96 | 1.10 | 1.06 | 2.51 | 0.91 | 0.16 | 1.38 | 0.24 | 0.31 | 0.73 |
| 20 | 34,2 | M4 | 35 | 18,5 | M30x1 | 28,5 | 32 | 29,4 | 63,7 | 23,05 | 4 | 38 | 6 | 10 | 18,5 |
| | 1.35 | | 1.38 | 0.73 | | 1.12 | 1.26 | 1.16 | 2.51 | 0.91 | 0.16 | 1.50 | 0.24 | 0.39 | 0.73 |
| 22 | 37,4 | M4 | 38 | 20,8 | M32x1 | 30,5 | 34 | 31,8 | 63,7 | 23,05 | 4 | 41 | 6 | 10 | 18,5 |
| | 1.47 | | 1.50 | 0.82 | | 1.20 | 1.34 | 1.25 | 2.51 | 0.91 | 0.16 | 1.61 | 0.24 | 0.39 | 0.73 |
| 24 | 40,9 | M4 | 41 | 24,6 | M36x1 | 34,5 | 38 | 34,9 | 62,5 | 23,05 | 4 | 44,5 | 6 | 10 | 18,5 |
| | 1.61 | | 1.61 | 0.97 | | 1.36 | 1.50 | 1.37 | 2.46 | 0.91 | 0.16 | 1.75 | 0.24 | 0.39 | 0.73 |
| 28 | 46,7 | M5 | 48 | 27 | M39x1 | 37,5 | 41 | 39,7 | 64,4 | 24,05 | 4 | 50,8 | 6 | 10 | 18,5 |
| | 1.84 | | 1.89 | 1.06 | | 1.48 | 1.61 | 1.56 | 2.53 | 0.95 | 0.16 | 2.00 | 0.24 | 0.39 | 0.73 |
| 32 | 53,4 | M5 | 54 | 33,3 | M45x1 | 44 | 48 | 44,5 | 66 | 24,05 | 4 | 57 | 6 | 10 | 18,5 |
| | 2.10 | | 2.12 | 1.31 | | 1.73 | 1.89 | 1.75 | 2.60 | 0.95 | 0.16 | 2.24 | 0.24 | 0.39 | 0.73 |
| 36 | 59,6 | M5 | 61 | 38,5 | M52x1 | 51 | 55 | 49,2 | 66 | 24,05 | 4 | 63,5 | 6 | 10 | 18,5 |
| | 2.35 | | 2.40 | 1.51 | | 2.01 | 2.16 | 1.94 | 2.60 | 0.95 | 0.16 | 2.50 | 0.24 | 0.39 | 0.73 |
| 40 | 65,5 | M5 | 68 | 46 | M59x1 | 58 | 62 | 55.5 | 66 | 24,05 | 4 | 69,9 | 6 | 10 | 18,5 |
| | 2.58 | | 2.68 | 1.81 | | 2.28 | 2.44 | 2.18 | 2.60 | 0.95 | 0.16 | 2.75 | 0.24 | 0.39 | 0.73 |

* Nominal dimension with tightend backshell
Dimensions are mm. over inches

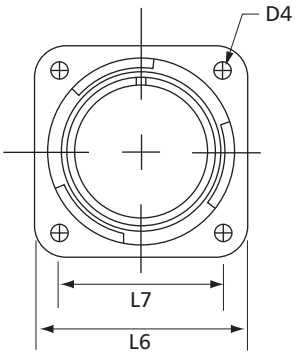
Receptacle with threaded mounting holes for terminating braided shield. Straight backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not included). ASBT same as SBT but without a grommet.

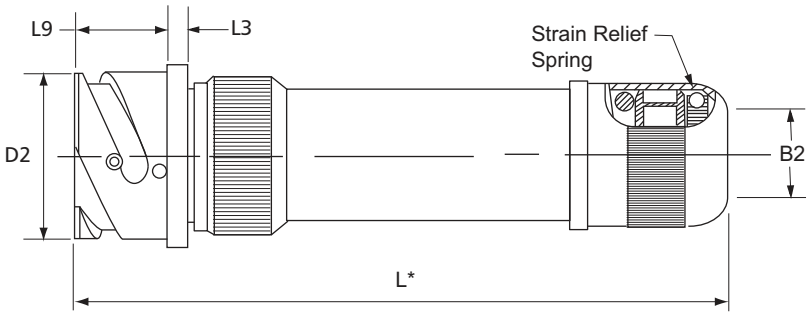



| Shell Size | $D_2$ Max. | $D_4$ +/- 0,1 .004 | $L_3$ +/- 0,2 .008 | $L_6$ +/- 0,3 .012 | $L_7$ +/- 0,1 .004 | $L_9$ + 0,4 .016 | H +/- 0,5 .020 | G | F | E +/- 0,25 .010 | D Max. | CIR030 Approx. | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 .72 | 3,2 .126 | 2,8 .110 | 25,4 1.00 | 18,2 .717 | 18,2 .717 | 22,0 .866 | 18,5 .73 | 16,3 .64 | 7,9 .312 | 11,13 .44 | 64,8 2.55 | TR 05 |
| 14S | 24,6 .97 | 3,2 .126 | 3,2 .126 | 30,0 1.181 | 23,0 .906 | 18,2 .717 | 24,8 .976 | 22,0 .87 | 20,0 .79 | 11,1 .437 | 14,3 .56 | 64,8 2.55 | TR 07 |
| 16S | 27,4 1.08 | 3,2 .126 | 3,2 .126 | 32,5 1.280 | 24,6 .969 | 18,2 .717 | 27,8 1.094 | 25,0 .98 | 23,0 .91 | 12,7 .500 | 15,9 .63 | 66,8 2.63 | TR 08 |
| 16 | 27,4 1.08 | 3,2 .126 | 3,2 .126 | 32,5 1.280 | 24,6 .969 | 23,1 .909 | 27.8 1.094 | 25,0 .98 | 23,0 .91 | 12,7 .500 | 15,9 .63 | 73,0 2.87 | TR 08 |
| 18 | 30,8 1.21 | 3,2 .126 | 4,0 .157 | 35,0 1.378 | 27,0 1.063 | 23,1 .909 | 30,8 1.213 | 28,0 1.10 | 24,5 .97 | 15,88 .625 | 19,1 .75 | 74,2 2.92 | TR 10 |
| 20 | 34,2 1.35 | 3,2 .126 | 4,0 .157 | 38,0 1.496 | 29,4 1.157 | 23,1 .909 | 34,8 1.370 | 32,0 1.26 | 28.5 1.12 | 19,05 .750 | 22,3 .88 | 75,4 2.97 | TR 12 |
| 22 | 37,4 1.47 | 3,2 .126 | 4,0 .157 | 41,0 1.614 | 31,8 1.252 | 23,1 .909 | 37,8 1.488 | 34,0 1.34 | 30,5 1.20 | 22,2 .875 | 25,4 1.00 | 74,7 2.94 | TR 14 |
| 24 | 40,9 1.61 | 3,7 .146 | 4,0 .157 | 44,5 1.752 | 34,9 1.374 | 23,1 .909 | 40,8 1.606 | 38,0 1.50 | 34,5 1.36 | 25,4 1.00 | 28,7 1.13 | 73,0 2.87 | TR 16 |
| 28 | 46,7 1.84 | 3,7 .146 | 4,0 .157 | 50,8 2.000 | 39,7 1.563 | 24,1 .949 | 47,8 1.881 | 41,0 1.61 | 37,5 1.48 | 28,58 1.125 | 31,75 1.25 | 76,1 3.00 | TR 18 |
| 32 | 53,4 2.10 | 4,3 .169 | 4,0 .157 | 57,0 2.244 | 44,5 1.752 | 24,1 .949 | 53,8 2.118 | 48,0 1.89 | 44,0 1.73 | 28,58 1.125 | 31,75 1.25 | 77,7 3.06 | TR 18 |
| 36 | 59,6 2.35 | 4,3 .169 | 4,0 .157 | 63,5 2.500 | 49,2 1.937 | 24,1 .949 | 60,8 2.394 | 55,0 2.17 | 51,0 2.01 | 41,28 1.625 | 44,45 1.75 | 76,5 3.01 | Not Available |
| 40 | 65.5 2.58 | 4,3 .169 | 4,0 2.579 | 69,9 .157 | 55,5 2.752 | 24,1 2.185 | 67,8 2.669 | 62,0 2.44 | 58,0 2.28 | 47,63 1.875 | 50,8 2.00 | 76,5 3.01 | Not Available |

Dimensions are mm. over inches

Receptacle with threaded mounting holes for terminating jacketed cable. Long WK backshell and backnut assembly suitable to seal and grip on the jacket of the cable. WKG same as WK but includes a wire sealing grommet and compression ring.



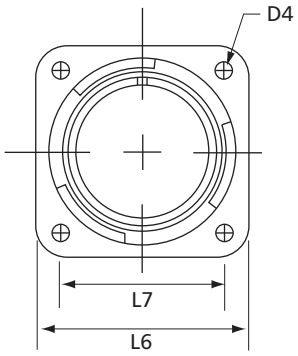

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

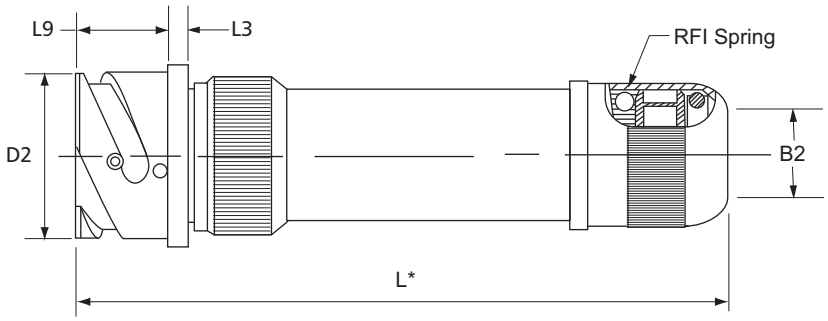
| Shell Size | $D_2$ Max. | $D_4$ +/- 0,1 .004 | $L_3$ +/- 0,2 .008 | $L_6$ +/- 0,3 .012 | $L_7$ +/- 0,1 .004 | $L_9$ + 0,2 .008 |
|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 2,8 | 25,4 | 18,2 | 18,2 |
| | .72 | .126 | .110 | 1.00 | .717 | .717 |
| 14S | 24,6 | 3,2 | 3,2 | 30,0 | 23,0 | 18,2 |
| | .97 | .126 | .126 | 1.181 | .906 | .717 |
| 16S | 27,4 | 3,2 | 3,2 | 32,5 | 24,6 | 18,2 |
| | 1.08 | .126 | .126 | 1.280 | .969 | .717 |
| 16 | 27,4 | 3,2 | 3,2 | 32,5 | 24,6 | 23,1 |
| | 1.08 | .126 | .126 | 1.280 | .969 | .909 |
| 18 | 30,8 | 3,2 | 4,0 | 35,0 | 27,0 | 23,1 |
| | 1.21 | .126 | .157 | 1.378 | 1.063 | .909 |
| 20 | 34,2 | 3,2 | 4,0 | 38,0 | 29,4 | 23,1 |
| | 1.35 | .126 | .157 | 1.496 | 1.157 | .909 |
| 22 | 37,4 | 3,2 | 4,0 | 41,0 | 31,8 | 23,1 |
| | 1.47 | .126 | .157 | 1.614 | 1.252 | .909 |
| 24 | 40,9 | 3,7 | 4,0 | 44,5 | 34,9 | 23,1 |
| | 1.61 | .146 | .157 | 1.752 | 1.374 | .909 |
| 28 | 46,7 | 3,7 | 4,0 | 50,8 | 39,7 | 24,1 |
| | 1.84 | .146 | .157 | 2.000 | 1.563 | .949 |
| 32 | 53,4 | 4,3 | 4,0 | 57,0 | 44,5 | 24,1 |
| | 2.10 | .169 | .157 | 2.244 | 1.752 | .949 |
| 36 | 59,6 | 4,3 | 4,0 | 63,5 | 49,2 | 24,1 |
| | 2.35 | .169 | .157 | 2.500 | 1.937 | .949 |
| 40 | 65.5 | 4,3 | 4,0 | 69,9 | 55,5 | 24,1 |
| | 2.58 | .169 | 2.579 | .157 | 2.752 | 2.185 |

| B2 Suffix in Connector Part No. | B2 Cable Range Min. | Max. |
|---|---|---|
| 02 | 3,18 | 6,35 |
| | .125 | .250 |
| 03 | 3,99 | 9,53 |
| | .157 | .375 |
| 04 | 7,16 | 12,7 |
| | .282 | .500 |
| 05 | 10,34 | 15,8 |
| | .407 | .625 |
| 06 | 13,51 | 19,05 |
| | .532 | .750 |
| 07 | 16,69 | 22,23 |
| | .657 | .875 |
| 08 | 19,86 | 25,4 |
| | .782 | 1.000 |
| 09 | 23,04 | 28,58 |
| | .907 | 1.125 |
| 10 | 26,21 | 31,75 |
| | 1.032 | 1.250 |
| 11 | 29,39 | 34,93 |
| | 1.157 | 1.375 |
| 12 | 32,56 | 38,1 |
| | 1.282 | 1.500 |
| 17 | 50,80 | 53,99 |
| | 2.000 | 2.125 |

Dimensions are mm. over inches

Receptacle with threaded mounting holes for terminating braided shield. Long WK backshell, grommet, and backnut assembly suitable for shield termination and strain relief on the jacket of the cable.



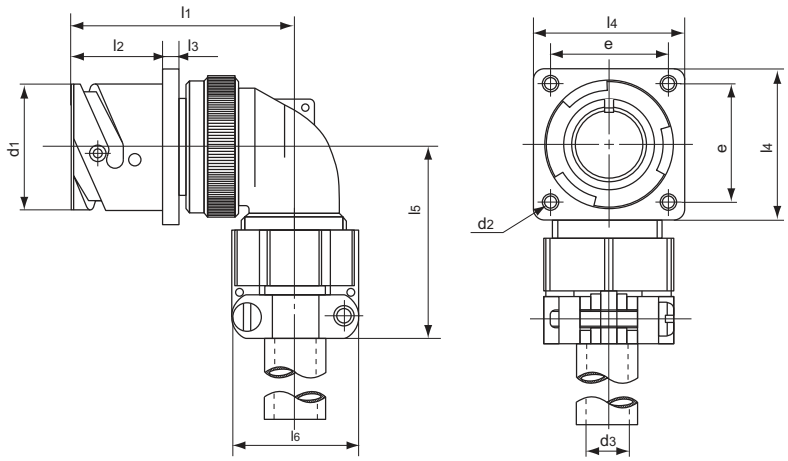

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

| Shell Size | $D_2$ Max. | $D_4$ +/- 0,1 .004 | $L_3$ +/- 0,2 .008 | $L_6$ +/- 0,3 .012 | $L_7$ +/- 0,1 .004 | $L_9$ + 0,4 .016 | L Approx. |
|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 2,8 | 25,4 | 18,2 | 18,2 | 111 |
| | .72 | .126 | .110 | 1.00 | .717 | .717 | 4.37 |
| 14S | 24,6 | 3,2 | 3,2 | 30,0 | 23,0 | 18,2 | 112 |
| | .97 | .126 | .126 | 1.181 | .906 | .717 | 4.41 |
| 16S | 27,4 | 3,2 | 3,2 | 32,5 | 24,6 | 18,2 | 100 |
| | 1.08 | .126 | .126 | 1.280 | .969 | .717 | 3.94 |
| 16 | 27,4 | 3,2 | 3,2 | 32,5 | 24,6 | 23,1 | 110 |
| | 1.08 | .126 | .126 | 1.280 | .969 | .909 | 4.33 |
| 18 | 30,8 | 3,2 | 4,0 | 35,0 | 27,0 | 23,1 | 127 |
| | 1.21 | .126 | .157 | 1.378 | 1.063 | .909 | 5.00 |
| 20 | 34,2 | 3,2 | 4,0 | 38,0 | 29,4 | 23,1 | 127 |
| | 1.35 | .126 | .157 | 1.496 | 1.157 | .909 | 5.00 |
| 22 | 37,4 | 3,2 | 4,0 | 41,0 | 31,8 | 23,1 | 1.33 |
| | 1.47 | .126 | .157 | 1.614 | 1.252 | .909 | 5.24 |
| 24 | 40,9 | 3,7 | 4,0 | 44,5 | 34,9 | 23,1 | 134 |
| | 1.61 | .146 | .157 | 1.752 | 1.374 | .909 | 5.28 |
| 28 | 46,7 | 3,7 | 4,0 | 50,8 | 39,7 | 24,1 | 134 |
| | 1.84 | .146 | .157 | 2.000 | 1.563 | .949 | 5.28 |
| 32 | 53,4 | 4,3 | 4,0 | 57,0 | 44,5 | 24,1 | 136 |
| | 2.10 | .169 | .157 | 2.244 | 1.752 | .949 | 5.35 |
| 36 | 59,6 | 4,3 | 4,0 | 63,5 | 49,2 | 24,1 | 136 |
| | 2.35 | .169 | .157 | 2.500 | 1.937 | .949 | 5.35 |
| 40 | 65.5 | 4,3 | 4,0 | 69,9 | 55,5 | 24,1 | 136 |
| | 2.58 | .169 | 2.579 | .157 | 2.752 | 2.185 | .949 |

| B2 Suffix in Connector Part No. | B2 Cable Range Min. | Max. |
|---|---|---|
| 02 | 3,18 | 6,35 |
| | .125 | .250 |
| 03 | 3,99 | 9,53 |
| | .157 | .375 |
| 04 | 7,16 | 12,7 |
| | .282 | .500 |
| 05 | 10,34 | 15,8 |
| | .407 | .625 |
| 06 | 13,51 | 19,05 |
| | .532 | .750 |
| 07 | 16,69 | 22,23 |
| | .657 | .875 |
| 08 | 19,86 | 25,4 |
| | .782 | 1.000 |
| 09 | 23,04 | 28,58 |
| | .907 | 1.125 |
| 10 | 26,21 | 31,75 |
| | 1.032 | 1.250 |
| 11 | 29,39 | 34,93 |
| | 1.157 | 1.375 |
| 12 | 32,56 | 38,1 |
| | 1.282 | 1.500 |
| 17 | 50,80 | 53,99 |
| | 2.000 | 2.125 |

Dimensions are mm. over inches

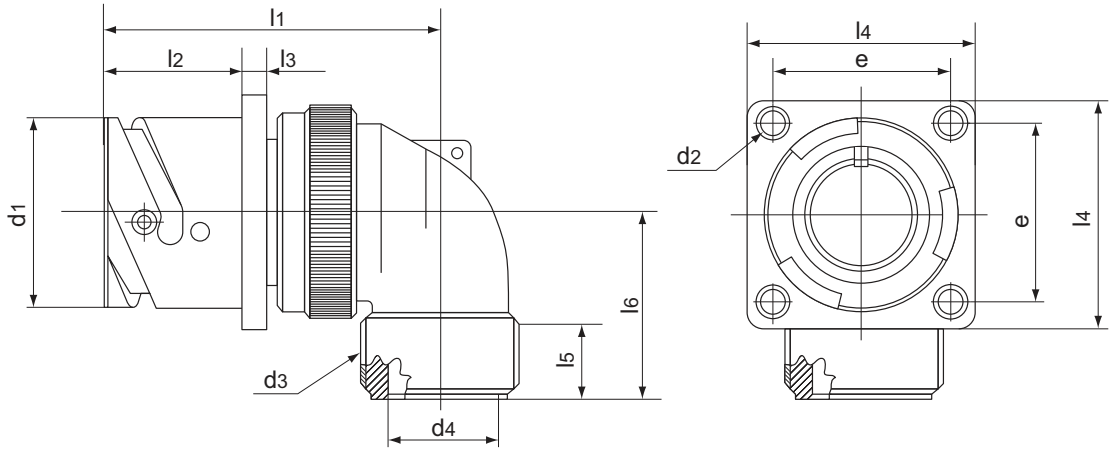
Receptacle with threaded mounting holes, 90° elbow and cable clamp with bushing. F type has an individual wire sealing grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ * max. | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ max. | $l_6$ max. |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 5,6 | 18,2 | 45 | 18,2 | 2,8 | 25,4 | 42 | 22,7 |
| | 0.72 | | 0.22 | 0.72 | 1.77 | 0.72 | 0.11 | 1.00 | 1.65 | 0.89 |
| 14S | 24,6 | M4 | 7,9 | 23 | 47 | 18,2 | 3,2 | 30 | 42 | 27,5 |
| | 0.97 | | 0.31 | 0.90 | 1.85 | 0.72 | 0.12 | 1.18 | 1.65 | 1.08 |
| 16S | 27,4 | M4 | 11 | 24,6 | 48 | 18,2 | 3,2 | 32,5 | 45 | 30 |
| | 1,08 | | 0.43 | 0.97 | 1.89 | 0.72 | 0.12 | 1.28 | 1.77 | 1.18 |
| 16 | 27,4 | M4 | 11 | 24,6 | 57 | 23,05 | 3,2 | 32,5 | 45 | 30 |
| | 1,08 | | 0.43 | 0.97 | 2.24 | 0.91 | 0.12 | 1.28 | 1.77 | 1.18 |
| 18 | 30,8 | M4 | 14,2 | 27 | 58 | 23,05 | 4 | 35 | 53 | 32,2 |
| | 1.21 | | 0.56 | 1.06 | 2.28 | 0.91 | 0.16 | 1.38 | 2.09 | 1.27 |
| 20 | 34,2 | M4 | 15,8 | 29,4 | 61 | 23,05 | 4 | 38 | 53 | 37,5 |
| | 1.35 | | 0.62 | 1.16 | 2.40 | 0.91 | 0.16 | 1.50 | 2.09 | 1.48 |
| 22 | 37,4 | M4 | 15,8 | 31,8 | 61 | 23,05 | 4 | 41 | 53 | 37,5 |
| | 1.47 | | 0.62 | 1.25 | 2.40 | 0.91 | 0.16 | 1.61 | 2.09 | 1.48 |
| 24 | 40,9 | M4 | 19 | 34,9 | 66 | 23,05 | 4 | 44,5 | 58 | 43,3 |
| | 1.61 | | 0.75 | 1.37 | 2.60 | 0.91 | 0.16 | 1.75 | 2.28 | 1.70 |
| 28 | 46,7 | M5 | 19 | 39,7 | 66 | 24,05 | 4 | 50,8 | 58 | 43,3 |
| | 1.84 | | 0.75 | 1.56 | 2.60 | 0.95 | 0.16 | 2.00 | 2.28 | 1.70 |
| 32 | 53,4 | M5 | 23,8 | 44,5 | 72 | 24,05 | 4 | 57 | 66 | 51,7 |
| | 2.10 | | 0.94 | 1.75 | 2.83 | 0.95 | 0.16 | 2.24 | 2.60 | 2.03 |
| 36 | 59,6 | M5 | 31,7 | 49,2 | 75 | 24,05 | 4 | 63,5 | 69 | 58 |
| | 2.35 | | 1.25 | 1.94 | 2.95 | 0.95 | 0.16 | 2.50 | 2.72 | 2.28 |
| 40 | 65,5 | M5 | 34,9 | 55,5 | 78 | 24,05 | 4 | 69,9 | 95 | 68.5 |
| | 2.58 | | 1.37 | 2.18 | 3.07 | 0.95 | 0.16 | 2.75 | 3.74 | 2.70 |

* Max. permissible outside diameter of cable.
Dimensions are mm. over inches

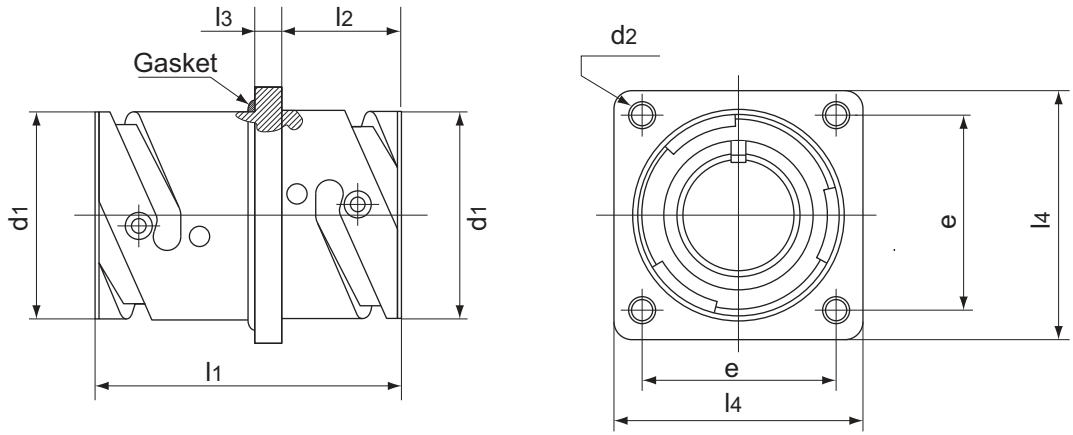
Receptacle with threaded mounting holes, 90° elbow and an individual wire sealing grommet. A type has no grommet. For through mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | $d_3$ Thread in inches | $d_4$ +0,2 -0,1 | e ±0,1 | $l_1$ max. | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 | $l_5$ min. | $l_6$ max. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 5/8-24 UNEF-2A | 10,5 | 18,2 | 45 | 18,2 | 2,8 | 25,4 | 9,4 | 30 |
| | 0.72 | | | 0.41 | 0.72 | 1.77 | 0.72 | 0.11 | 1.00 | 0.37 | 1.18 |
| 14S | 24,6 | M4 | 3/4-20 UNEF-2A | 11,5 | 23 | 47 | 18,2 | 3,2 | 30 | 9,4 | 30 |
| | 0.97 | | | 0.45 | 0.90 | 1.85 | 0.72 | 0.12 | 1.18 | 0.37 | 1.18 |
| 16S | 27,4 | M4 | 7/8-20 UNEF-2A | 14,7 | 24,6 | 48 | 18,2 | 3,2 | 32,5 | 9,4 | 30 |
| | 1.08 | | | 0.58 | 0.97 | 1.89 | 0.72 | 0.12 | 1.28 | 0.37 | 1.18 |
| 16 | 27,4 | M4 | 7/8-20 UNEF-2A | 14,7 | 24,6 | 57 | 23,05 | 3,2 | 32,5 | 9,4 | 30 |
| | 1.08 | | | 0.58 | 0.97 | 2.24 | 0.91 | 0.12 | 1.28 | 0.37 | 1.18 |
| 18 | 30,8 | M4 | 1"-20 UNEF-2A | 17,2 | 27 | 58 | 23,05 | 4 | 35 | 9,54 | 35 |
| | 1.21 | | | 0.68 | 1.06 | 2.28 | 0.91 | 0.16 | 1.38 | 0.375 | 1.38 |
| 20 | 34,2 | M4 | 1"3/16-18 UNEF-2A | 20,35 | 29,4 | 61 | 23,05 | 4 | 38 | 9,4 | 35 |
| | 1.35 | | | 0.80 | 1.16 | 2.40 | 0.91 | 0.16 | 1.50 | 0.37 | 1.38 |
| 22 | 37,4 | M4 | 1"3/16-18 UNEF-2A | 23 | 31,8 | 61 | 23,05 | 4 | 41 | 9,4 | 35 |
| | 1.47 | | | 0.90 | 1.25 | 2.40 | 0.91 | 0.16 | 1.61 | 0.37 | 1.38 |
| 24 | 40,9 | M4 | 1"7/16-18 UNEF-2A | 25,8 | 34,9 | 66 | 23,05 | 4 | 44,5 | 9,5 | 40 |
| | 1.61 | | | 1.015 | 1.37 | 2.60 | 0.91 | 0.16 | 1.75 | 0.374 | 1.57 |
| 28 | 46,7 | M5 | 1"7/16-18 UNEF-2A | 25,7 | 39,7 | 66 | 24,05 | 4 | 50,8 | 9,5 | 40 |
| | 1.84 | | | 1.011 | 1.56 | 2.60 | 0.95 | 0.16 | 2.00 | 0.374 | 1.57 |
| 32 | 53,4 | M5 | 1"3/4-18 UNS-2A | 36,5 | 44,5 | 72 | 24,05 | 4 | 57 | 11 | 45 |
| | 2.10 | | | 1.44 | 1.75 | 2.83 | 0.95 | 0.16 | 2.24 | 0.43 | 1.77 |
| 36 | 59,6 | M5 | 2"-18 UNS-2A | 42,6 | 49,2 | 75 | 24,05 | 4 | 63,5 | 12,6 | 50 |
| | 2.35 | | | 1.68 | 1.94 | 2.95 | 0.95 | 0.16 | 2.50 | 0.50 | 1.97 |
| 40 | 65,5 | M5 | 2"1/4-16 UN-2A | 48,6 | 55,5 | 78 | 24,05 | 4 | 69,9 | 12,6 | 55 |
| | 2.58 | | | 1.91 | 2.18 | 3.07 | 0.95 | 0.16 | 2.75 | 0.50 | 2.16 |

Dimensions are mm. over inches

Thru-Bulkhead receptacle with threaded mounting holes. For through mounting holes, see page 197.

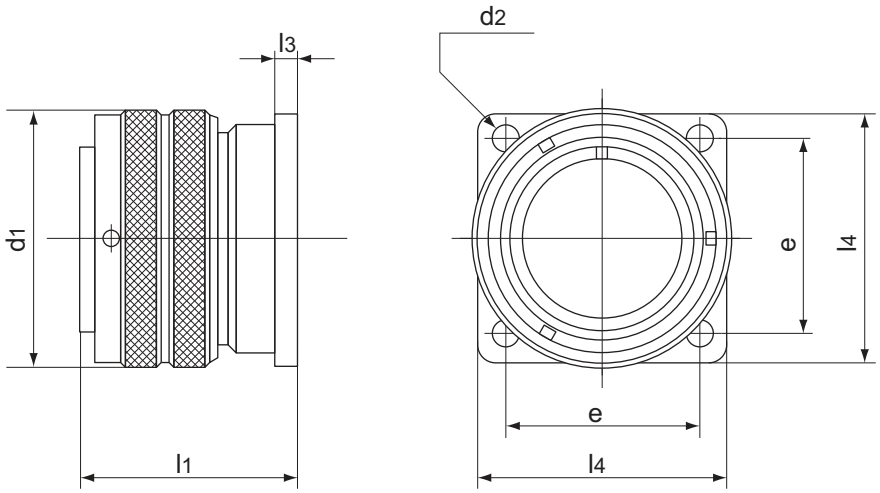



| Shell Size | $d_1$ +0 -0,15 | $d_2$ — | e ±0,1 | $l_1$ ±0,7 | $l_2$ +0,4 -0 | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | M4 | 18,2 | 37,5 | 14,2 | 2,8 | 25,4 |
| | 0.72 | | 0.72 | 1.48 | 0.56 | 0.11 | 1.00 |
| 14S | 24,6 | M4 | 23 | 37,5 | 14,2 | 3,2 | 30 |
| | 0.97 | | 0.90 | 1.48 | 0.56 | 0.12 | 1.18 |
| 16S | 27,4 | M4 | 24,6 | 37,5 | 14,2 | 3,2 | 32,5 |
| | 1.08 | | 0.97 | 1.48 | 0.56 | 0.12 | 1.28 |
| 16 | 27,4 | M4 | 24,6 | 51,4 | 19 | 3,2 | 32,5 |
| | 1.08 | | 0.97 | 2.02 | 0.75 | 0.12 | 1.28 |
| 18 | 30,8 | M4 | 27 | 51,4 | 19 | 4 | 35 |
| | 1.21 | | 1.06 | 2.02 | 0.75 | 0.16 | 1.38 |
| 20 | 34,2 | M4 | 29,4 | 51,4 | 19 | 4 | 38 |
| | 1.35 | | 1.16 | 2.02 | 0.75 | 0.16 | 1.50 |
| 22 | 37,4 | M4 | 31,8 | 51,4 | 19 | 4 | 41 |
| | 1.47 | | 1.25 | 2.02 | 0.75 | 0.16 | 1.61 |
| 24 | 40,9 | M4 | 34,9 | 51,4 | 20,6 | 4 | 44,5 |
| | 1.61 | | 1.37 | 2.02 | 0.81 | 0.16 | 1.75 |
| 28 | 46,7 | M5 | 39,7 | 51,4 | 20,6 | 4 | 50,8 |
| | 1.84 | | 1.56 | 2.02 | 0.81 | 0.16 | 2.00 |
| 32 | 53,4 | M5 | 44,5 | 51,4 | 22,2 | 4 | 57 |
| | 2.10 | | 1.75 | 2.02 | 0.87 | 0.16 | 2.24 |
| 36 | 59,6 | M5 | 49,2 | 51,4 | 22,2 | 4 | 63,5 |
| | 2.35 | | 1.94 | 2.02 | 0.87 | 0.16 | 2.50 |
| 40 | 65,5 | M5 | 55,5 | 51,4 | 22,2 | 4 | 69,9 |
| | 2.58 | | 2.18 | 2.02 | 0.87 | 0.16 | 2.75 |

Dimensions are mm. over inches

Panel mounting plug connector.

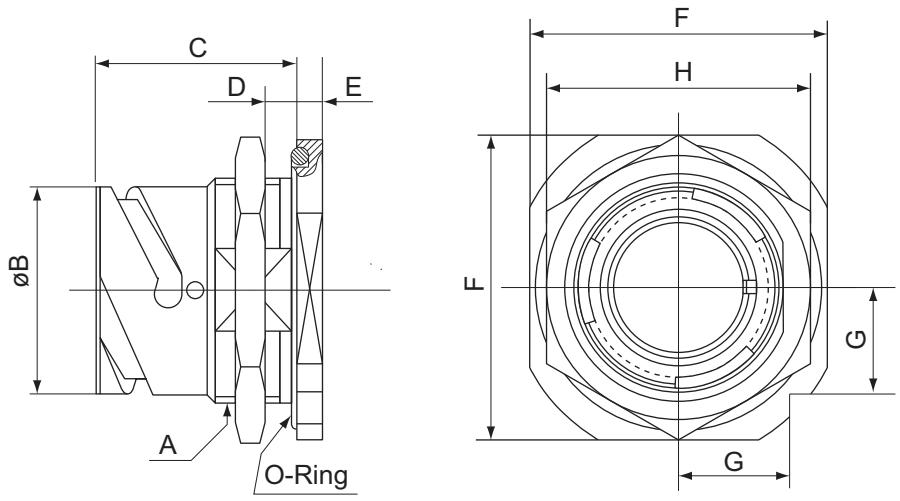
Order reference:
CIR26 - 36 - 10P - F80 (crimp)
CIR26 - 36 - 10P - (solder)




| Shell Size | $d_1$ max. | $d_2$ H13 | e ±0,1 | $l_1$ ~ | $l_3$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|
| 10SL | 22,8 | 3,2 | 18,2 | 28,1 | 2,8 | 25,4 |
| | 0.90 | 0.12 | 0.72 | 1.11 | 0.11 | 1.00 |
| 14S | 29,2 | 3,2 | 23 | 28,1 | 3,2 | 30,0 |
| | 1.15 | 0.12 | 0.90 | 1.11 | 0.12 | 1.18 |
| 16S | 32 | 3,2 | 24,6 | 28,1 | 3,2 | 32,5 |
| | 1.26 | 0.12 | 0.97 | 1.11 | 0.12 | 1.28 |
| 16 | 32 | 3,2 | 24,6 | 37,6 | 3,2 | 32,5 |
| | 1.26 | 0.12 | 0.97 | 1.48 | 0.12 | 1.28 |
| 18 | 36,5 | 3,2 | 27 | 37,6 | 4,0 | 35,0 |
| | 1.44 | 0.12 | 1.06 | 1.48 | 0.16 | 1.38 |
| 20 | 39,9 | 3,2 | 29,4 | 38,6 | 4,0 | 38,0 |
| | 1.57 | 0.12 | 1.16 | 1.52 | 0.16 | 1.50 |
| 22 | 43,1 | 3,2 | 31,8 | 37,6 | 4,0 | 41,0 |
| | 1.70 | 0.12 | 1.25 | 1.48 | 0.16 | 1.61 |
| 24 | 46,6 | 3,7 | 34,9 | 41,0 | 4,0 | 44,5 |
| | 1.83 | 0.14 | 1.37 | 1.61 | 0.16 | 1.75 |
| 28 | 53,4 | 3,7 | 39,7 | 41,8 | 4,0 | 50,8 |
| | 2.10 | 0.14 | 1.56 | 1.64 | 0.16 | 2.00 |
| 32 | 60,1 | 4,3 | 44,5 | 45,0 | 4,0 | 57,0 |
| | 2.37 | 0.17 | 1.75 | 1.77 | 0.16 | 2.24 |
| 36 | 66,3 | 4,3 | 49,2 | 43,0 | 4,0 | 63,5 |
| | 2.61 | 0.17 | 1.94 | 1.69 | 0.16 | 2.50 |
| 40 | 72,5 | 4,3 | 55,5 | 45,0 | 4,0 | 69,9 |
| | 2.85 | 0.17 | 2.18 | 1.77 | 0.16 | 2.75 |

Dimensions are mm. over inches

Receptacle single hole mount without rear accessories. For panel mounting hole dimensions, see page 196.

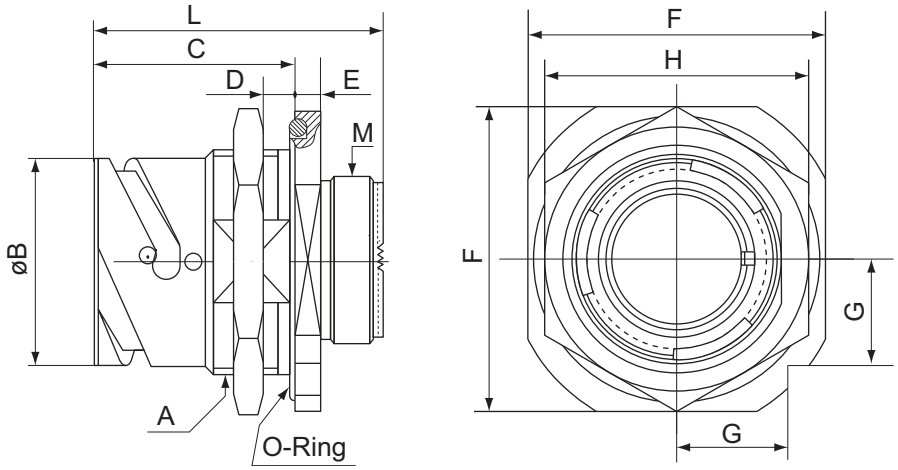



| Shell Size | A Thread in inches | ø B +0 -0,15 | C — | D Wall Thickness min. | D Wall Thickness max. | E ~ | F ±0,25 | G ~ | H — |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 7/8-20 UNEF-2A | 18,2 | 24,5 | 2,4 | 5,2 | 4 | 31,8 | 11,2 | 27 |
| | | 0.72 | 0.96 | 0.09 | 0.20 | 0.16 | 1.25 | 0.44 | 1.06 |
| 14S | 1"1/8-18 UNEF-2A | 24,6 | 26,8 | 2,4 | 7,5 | 4,8 | 41,3 | 14,6 | 33 |
| | | 0.97 | 1.05 | 0.09 | 0.29 | 1.89 | 1.62 | 0.57 | 1.30 |
| *16S | 1"1/4-18 UNEF-2A | 27,4 | 26,8 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 |
| | | 1.08 | 1.05 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 |
| *16 | 1"1/4-18 UNEF-2A | 27,4 | 32,1 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 |
| | | 1.08 | 1.26 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 |
| 18 | 1"3/8-18 UNEF-2A | 30,8 | 33,7 | 2,4 | 9 | 4,8 | 47,6 | 16,8 | 39,7 |
| | | 1.21 | 1.33 | 0.09 | 0.35 | 1.89 | 1.87 | 0.66 | 1.56 |
| 20 | 1"1/2-18 UNEF-2A | 34,2 | 33,7 | 2,4 | 9 | 4,8 | 50,8 | 18 | 44 |
| | | 1.35 | 1.33 | 0.09 | 0.35 | 1.89 | 2.00 | 0.71 | 1.73 |
| 22 | 1"5/8-18 UNEF-2A | 37,4 | 33,7 | 2,4 | 9,1 | 4,8 | 54,2 | 20,2 | 46 |
| | | 1.47 | 1.33 | 0.09 | 0.36 | 1.89 | 2.13 | 0.79 | 1.81 |
| 24 | 1"3/4-18 UNS-2A | 40,9 | 33,7 | 2,4 | 9,1 | 4,8 | 57,2 | 20,2 | 50,8 |
| | | 1.61 | 1.33 | 0.09 | 0.36 | 1.89 | 2.25 | 0.79 | 2.00 |
| 28 | 2"-18 UNS-2A | 46,7 | 35,2 | 2,4 | 8,5 | 5,6 | 63,5 | 22,5 | 55 |
| | | 1.84 | 1.38 | 0.09 | 0.33 | 0.22 | 2.50 | 0.88 | 2.16 |
| 32 | 2"1/4-16 UN-2A | 53,4 | 35,2 | 2,4 | 6,5 | 5,6 | 69,8 | 24,7 | 62 |
| | | 2.10 | 1.38 | 0.09 | 0.25 | 0.22 | 2.75 | 0.97 | 2.44 |
| 36 | 2"1/2-16 UN-2A | 59,6 | 35,2 | 2,4 | 8,3 | 5,6 | 76,2 | 26,9 | 71 |
| | | 2.35 | 1.38 | 0.09 | 0.33 | 0.22 | 3.00 | 1.06 | 2.79 |
| 40 | 2"3/4-16 UN-2A | 65,5 | 35,2 | 2,4 | 8,3 | 5,6 | 83,5 | 29,6 | 75 |
| | | 2.58 | 1.38 | 0.09 | 0.33 | 0.22 | 3.29 | 1.16 | 2.95 |

* Consult Factory

Dimensions are mm. over inches

Receptacle single hole mount with threaded back end. Available only with crimp type contact. For panel mounting hole dimensions, see page 196.



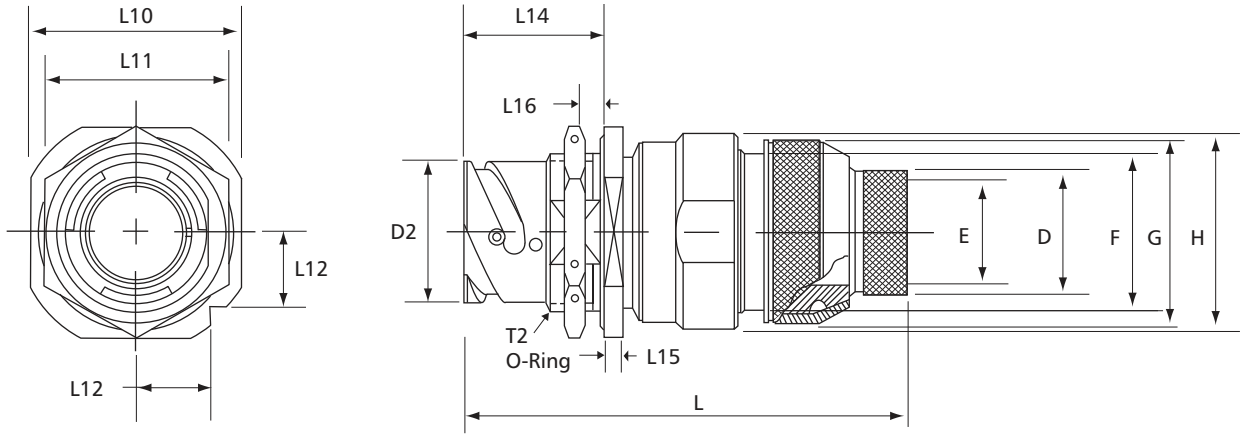

| Shell Size | A Thread in inches | ø B +0 -0,15 | C — | D Wall Thickness min. | D Wall Thickness max. | E — | F ± 0,25 | G — | H — | L ± 0,25 | M Thread in inches |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 7/8-20 UNEF-2A | 18,2 | 24,5 | 2,4 | 5,2 | 4 | 31,8 | 11,2 | 27 | 36,2 | 5/8-24 UNEF-2A |
| | | 0.72 | 0.96 | 0.09 | 0.20 | 0.16 | 1.25 | 0.44 | 1.06 | 1.42 | |
| 14S | 1"1/8-18 UNEF-2A | 24,6 | 26,8 | 2,4 | 7,5 | 4,8 | 41,3 | 14,6 | 33 | 38,9 | 3/4-20 UNEF-2A |
| | | 0.97 | 1.05 | 0.09 | 0.29 | 1.89 | 1.62 | 0.57 | 1.30 | 1.53 | |
| *16S | 1"1/4-18 UNEF-2A | 27,4 | 26,8 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 | 38,9 | 7/8-20 UNEF-2A |
| | | 1.08 | 1.05 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 | 1.53 | |
| *16 | 1"1/4-18 UNEF-2A | 27,4 | 32,1 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 | 48,5 | 7/8-20 UNEF-2A |
| | | 1.08 | 1.26 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 | 1.91 | |
| 18 | 1"3/8-18 UNEF-2A | 30,8 | 33,7 | 2,4 | 9 | 4,8 | 47,6 | 16,8 | 39,7 | 49,3 | 1"-20 UNEF-2A |
| | | 1.21 | 1.33 | 0.09 | 0.35 | 1.89 | 1.87 | 0.66 | 1.56 | 1.94 | |
| 20 | 1"1/2-18 UNEF-2A | 34,2 | 33,7 | 2,4 | 9 | 4,8 | 50,8 | 18 | 44 | 49,3 | 1"1/8-18 UNEF-2A |
| | | 1.35 | 1.33 | 0.09 | 0.35 | 1.89 | 2.00 | 0.71 | 1.73 | 1.94 | |
| 22 | 1"5/8-18 UNEF-2A | 37,4 | 33,7 | 2,4 | 9,1 | 4,8 | 54,2 | 20,2 | 46 | 49,3 | 1"1/4-18 UNEF-2A |
| | | 1.47 | 1.33 | 0.09 | 0.36 | 1.89 | 2.13 | 0.79 | 1.81 | 1.94 | |
| 24 | 1"3/4-18 UNS-2A | 40,9 | 33,7 | 2,4 | 9,1 | 4,8 | 57,2 | 20,2 | 50,8 | 49,3 | 1"3/8-18 UNEF-2A |
| | | 1.61 | 1.33 | 0.09 | 0.36 | 1.89 | 2.25 | 0.79 | 2.00 | 1.94 | |
| 28 | 2"-18 UNS-2A | 46,7 | 35,2 | 2,4 | 8,5 | 5,6 | 63,5 | 22,5 | 55 | 51,9 | 1"5/8-18 UNEF-2A |
| | | 1.84 | 1.38 | 0.09 | 0.33 | 0.22 | 2.50 | 0.88 | 2.16 | 2.04 | |
| 32 | 2"1/4-16 UN-2A | 53,4 | 35,2 | 2,4 | 6,5 | 5,6 | 69,8 | 24,7 | 62 | 51,9 | 1"7/8-16 UN-2A |
| | | 2.10 | 1.38 | 0.09 | 0.25 | 0.22 | 2.75 | 0.97 | 2.44 | 2.04 | |
| 36 | 2"1/2-16 UN-2A | 59,6 | 35,2 | 2,4 | 8,3 | 5,6 | 76,2 | 26,9 | 71 | 51,9 | 2"1/16-16 UN-2A |
| | | 2.35 | 1.38 | 0.09 | 0.33 | 0.22 | 3.00 | 1.06 | 2.79 | 2.04 | |
| 40 | 2"3/4-16 UN-2A | 65,5 | 35,2 | 2,4 | 8,3 | 5,6 | 83,5 | 29,6 | 75 | 51,9 | 2"5/16-16 UN-2A |
| | | 2.58 | 1.38 | 0.09 | 0.33 | 0.22 | 3.29 | 1.16 | 2.95 | 2.04 | |

*Note: Rear teeth on this style receptacle shell are included only with G2, SB, SBT, classes or with 08 backshell*

* Consult Factory

Dimensions are mm. over inches

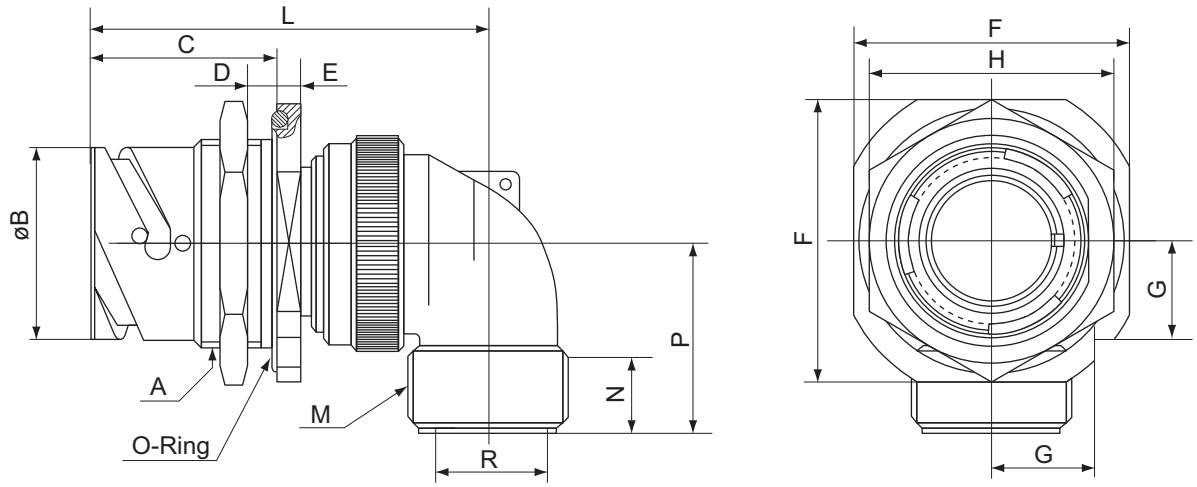
Jam nut receptacle for terminating braided shield. Straight backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not included). ASBT same as SBT but without a grommet.




| Shell Size | $D_2$ Max. | $L_{10}$ +/- 0,25 | $L_{11}$ | $L_{12}$ | $L_{14}$ | $L_{15}$ | $L_{16}$ Panel Min. | $L_{16}$ Panel Max. | T2 Thread | H +/- 0,5 .020 | G | F | E +/- 0,25 .010 | D Max. | L CIR070 Approx. | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18,2 | 31,8 | 27,0 | 11,2 | 24,5 | 4,0 | 2,4 | 5,2 | 7/8-20UNEF | 22,0 | 18,5 | 16,3 | 7,9 | 11,13 | 72,6 | TR 05 |
| | .72 | 1.25 | 1.063 | .44 | .97 | .16 | .094 | .205 | | .866 | .73 | .64 | .312 | .44 | 2.86 | |
| 14S | 24,6 | 41,3 | 33,0 | 14,6 | 26,8 | 4,8 | 2,4 | 7,5 | 1 1/8-18UNEF | 24,8 | 22,0 | 20,0 | 11,1 | 14,3 | 75,3 | TR 07 |
| | .97 | 1.63 | 1.299 | .575 | 1.06 | .19 | .094 | .295 | | .976 | .87 | .79 | .437 | .56 | 2.96 | |
| 16S | 27,4 | 44,4 | 38,1 | 15,7 | 26,8 | 4,8 | 2,4 | 7,5 | 1 1/4-18UNEF | 27,8 | 25,0 | 23,0 | 12,7 | 15,9 | 78,1 | TR 08 |
| | 1.08 | 1.75 | 1.500 | .62 | 1.06 | .19 | .094 | .295 | | 1.094 | .98 | .91 | .500 | .63 | 3.07 | |
| 16 | 27,4 | 44,4 | 38,1 | 15,7 | 32,1 | 4,8 | 2,4 | 7,5 | 1 1/4-18UNEF | 27.8 | 25,0 | 23,0 | 12,7 | 15,9 | 86,9 | TR 08 |
| | 1.08 | 1.75 | 1.500 | .62 | 1.26 | .19 | .094 | .295 | | 1.094 | .98 | .91 | .500 | .63 | 3.42 | |
| 18 | 30,8 | 47,6 | 39,7 | 16,8 | 33,7 | 4,8 | 2,4 | 9,0 | 1 3/8-18UNEF | 30,8 | 28,0 | 24,5 | 15,88 | 19,1 | 88,9 | TR 10 |
| | 1.21 | 1.87 | 1.563 | .66 | 1.33 | .19 | .094 | .354 | | 1.213 | 1.10 | .97 | .625 | .75 | 3.50 | |
| 20 | 34,2 | 50,8 | 44,0 | 18 | 33,7 | 4,8 | 2,4 | 9,0 | 1 1/2-18UNEF | 34,8 | 32,0 | 28.5 | 19,05 | 22,3 | 90,1 | TR 12 |
| | 1.35 | 2.00 | 1.732 | .71 | 1.33 | .19 | .094 | .354 | | 1.370 | 1.26 | 1.12 | .750 | .88 | 3.55 | |
| 22 | 37,4 | 54,2 | 46,0 | 20,2 | 33,7 | 4,8 | 2,4 | 9,1 | 1 5/8-18UNEF | 37,8 | 34,0 | 30,5 | 22,2 | 25,4 | 89,4 | TR 14 |
| | 1.47 | 2.25 | 1.811 | .80 | 1.33 | .19 | .094 | .358 | | 1.488 | 1.34 | 1.20 | .875 | 1.00 | 3.52 | |
| 24 | 40,9 | 57,2 | 50,8 | 20,2 | 33,7 | 4,8 | 2,4 | 9,1 | 1 3/4-18UNEF | 40,8 | 38,0 | 34,5 | 25,4 | 28,7 | 87,7 | TR 16 |
| | 1.61 | 2.25 | 2.000 | .80 | 1.33 | .19 | .094 | .358 | | 1.606 | 1.50 | 1.36 | 1.00 | 1.13 | 3.45 | |
| 28 | 46,7 | 63,5 | 55,0 | 22,5 | 35,2 | 5,6 | 2,4 | 8,5 | 2.00-18UNS | 47,8 | 41,0 | 37,5 | 28,58 | 31,75 | 91,5 | TR 18 |
| | 1.84 | 2.50 | 2.165 | .89 | 1.39 | .22 | .094 | .335 | | 1.881 | 1.61 | 1.48 | 1.125 | 1.25 | 3.60 | |
| 32 | 53,4 | 69,8 | 62,0 | 24,7 | 35,2 | 5,6 | 2,4 | 6,5 | 2 1/4-16UN | 53,8 | 48,0 | 44,0 | 28,58 | 31,75 | 91,5 | TR 18 |
| | 2.10 | 2.75 | 2.441 | .97 | 1.39 | .22 | .094 | .256 | | 2.118 | 1.89 | 1.73 | 1.125 | 1.25 | 3.60 | |
| 36 | 59,6 | 76,2 | 71,0 | 26,9 | 35,2 | 5,6 | 2,4 | 8,3 | 2 1/2-16UN | 60,8 | 55,0 | 51,0 | 41,28 | 44,45 | 90,3 | Not Available |
| | 2.35 | 3.00 | 2.795 | 1.06 | 1.39 | .22 | .094 | .327 | | 2.394 | 2.17 | 2.01 | 1.625 | 1.75 | 3.56 | |
| 40 | 65.5 | 83,5 | 75,0 | 29,6 | 35,2 | 5,6 | 2,4 | 8,3 | 2 3/4-16UN | 67,8 | 62,0 | 58,0 | 47,63 | 50,8 | 90,3 | Not Available |
| | 2.58 | 3.29 | 2.953 | 1.17 | 1.39 | .22 | .094 | .327 | | 2.669 | 2.44 | 2.28 | 1.875 | 2.00 | 3.56 | |

Dimensions are mm. over inches

Receptacle single hole mount with 90° elbow and an individual wire sealing grommet. A type has no grommet.Available only with crimp type contacts. For panel mounting hole dimensions, see page 196.

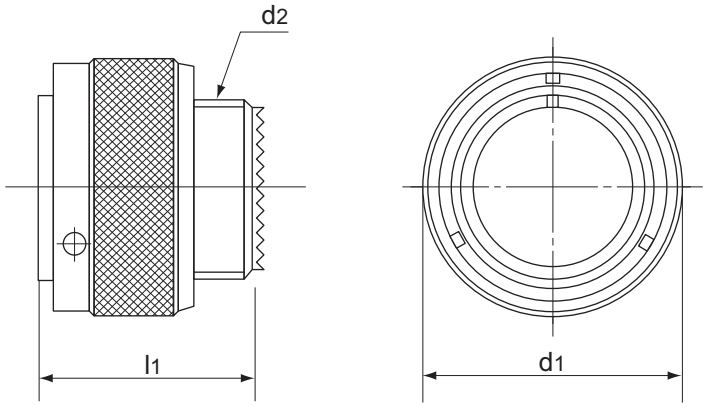



| Shell Size | A Thread in inches | ø B +0 -0,15 | C — | D Wall Thickness min. | D Wall Thickness max. | E — | F ±0,25 | G — | H — | L ~ | M Thread in inches | N min. | N max. | P +0,2 -0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 7/8-20 UNEF-2A | 18,2 | 24,5 | 2,4 | 5,2 | 4 | 31,8 | 11,2 | 27 | 49 | 5/8-24 UNEF-2A | 9,4 | 30 | 10,5 |
| | | 0.72 | 0.96 | 0.09 | 0.20 | 0.16 | 1.25 | 0.44 | 1.06 | 1.93 | | 0.37 | 1.18 | 0.41 |
| 14S | 1"1/8-18 UNEF-2A | 24,6 | 26,8 | 2,4 | 7,5 | 4,8 | 41,3 | 14,6 | 33 | 53 | 3/4-20 UNEF-2A | 9,4 | 30 | 11,5 |
| | | 0.97 | 1.05 | 0.09 | 0.29 | 1.89 | 1.62 | 0.57 | 1.30 | 2.09 | | 0.37 | 1.18 | 0.45 |
| *16S | 1"1/4-18 UNEF-2A | 27,4 | 26,8 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 | 58 | 7/8-20 UNEF-2A | 9,4 | 30 | 14,7 |
| | | 1.08 | 1.05 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 | 2.28 | | 0.37 | 1.18 | 0.58 |
| *16 | 1"1/4-18 UNEF-2A | 27,4 | 32,1 | 2,4 | 7,5 | 4,8 | 44,4 | 15,7 | 38,1 | 66 | 7/8-20 UNEF-2A | 9,4 | 30 | 14,7 |
| | | 1.08 | 1.26 | 0.09 | 0.29 | 1.89 | 1.75 | 0.62 | 1.50 | 2.60 | | 0.37 | 1.18 | 0.58 |
| 18 | 1"3/8-18 UNEF-2A | 30,8 | 33,7 | 2,4 | 9 | 4,8 | 47,6 | 16,8 | 39,7 | 72 | 1"-20 UNEF-2A | 9,4 | 35 | 17,2 |
| | | 1.21 | 1.33 | 0.09 | 0.35 | 1.89 | 1.87 | 0.66 | 1.56 | 2.83 | | 0.37 | 1.38 | 0.68 |
| 20 | 1"1/2-18 UNEF-2A | 34,2 | 33,7 | 2,4 | 9 | 4,8 | 50,8 | 18 | 44 | 75 | 1"3/16-18 UNEF-2A | 9,4 | 35 | 20,35 |
| | | 1.35 | 1.33 | 0.09 | 0.35 | 1.89 | 2.00 | 0.71 | 1.73 | 2.95 | | 0.37 | 1.38 | 0.80 |
| 22 | 1"5/8-18 UNEF-2A | 37,4 | 33,7 | 2,4 | 9,1 | 4,8 | 54,2 | 20,2 | 46 | 75 | 1"3/16-18 UNEF-2A | 9,4 | 35 | 23 |
| | | 1.47 | 1.33 | 0.09 | 0.36 | 1.89 | 2.13 | 0.79 | 1.81 | 2.95 | | 0.37 | 1.38 | 0.90 |
| 24 | 1"3/4-18 UNS-2A | 40,9 | 33,7 | 2,4 | 9,1 | 4,8 | 57,2 | 20,2 | 50,8 | 77 | 1"7/16-18 UNEF-2A | 9,4 | 40 | 25,8 |
| | | 1.61 | 1.33 | 0.09 | 0.36 | 1.89 | 2.25 | 0.79 | 2.00 | 3.03 | | 0.37 | 1.57 | 1.01 |
| 28 | 2"-18 UNS-2A | 46,7 | 35,2 | 2,4 | 8,5 | 5,6 | 63,5 | 22,5 | 55 | 79 | 1"7/16-18 UNEF-2A | 9,4 | 40 | 28,7 |
| | | 1.84 | 1.38 | 0.09 | 0.33 | 0.22 | 2.50 | 0.88 | 2.16 | 3.11 | | 0.37 | 1.57 | 1.13 |
| 32 | 2"1/4-16 UN-2A | 53,4 | 35,2 | 2,4 | 6,5 | 5,6 | 69,8 | 24,7 | 62 | 84 | 1"3/4-18 UNS-2A | 11 | 45 | 36,5 |
| | | 2.10 | 1.38 | 0.09 | 0.25 | 0.22 | 2.75 | 0.97 | 2.44 | 3.31 | | 0.43 | 1.77 | 1.44 |
| 36 | 2"1/2-16 UN-2A | 59,6 | 35,2 | 2,4 | 8,3 | 5,6 | 76,2 | 26,9 | 71 | 87 | 2"- 18 UNS-2A | 12,6 | 50 | 42,6 |
| | | 2.35 | 1.38 | 0.09 | 0.33 | 0.22 | 3.00 | 1.06 | 2.79 | 3.42 | | 0.50 | 1.97 | 1.68 |
| 40 | 2"3/4-16 UN-2A | 65,5 | 35,2 | 2,4 | 8,3 | 5,6 | 83,5 | 29,6 | 75 | 90 | 2"1/4-16 UN-2A | 12,6 | 55 | 48,6 |
| | | 2.58 | 1.38 | 0.09 | 0.33 | 0.22 | 3.29 | 1.16 | 2.95 | 3.54 | | 0.50 | 2.16 | 1.91 |

* Consult Factory

Dimensions are mm. over inches

Plug without accessories. CIRG type has"RFI" shield spring (for shielding characteristics see page 12).



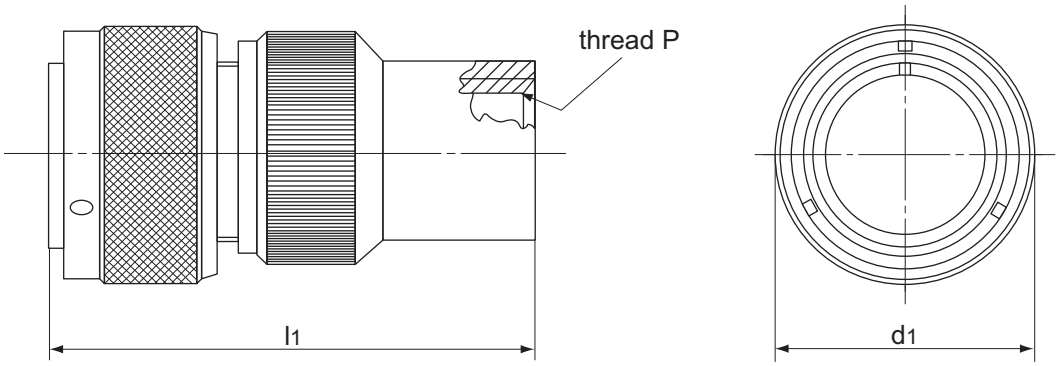

***IMPORTANT***

Above connectors are supplied (as in the picture) only when accessories are ordered separately. Consult factory.

| Shell Size | $d_1$ max. | $d_2$ Thread in inches | $l_1$ ± 0,3 |
|---|---|---|---|
| 10SL | 22,8<br>0.90 | 5/8 - 24 UNEF-2A | 24,6<br>0.97 |
| 14S | 29,2<br>1.15 | 3/4 - 20 UNEF-2A | 24,6<br>0.97 |
| 16S | 32<br>1.26 | 7/8 - 20 UNEF-2A | 24,6<br>0.97 |
| 16 | 32<br>1.26 | 7/8 - 20 UNEF-2A | 34,1<br>1.34 |
| 18 | 36,5<br>1.44 | 1" - 20 UNEF-2A | 34,1<br>1.34 |
| 20 | 39,9<br>1.57 | 1"1/8 -18 UNEF-2A | 34,1<br>1.34 |
| 22 | 43,1<br>1.70 | 1"1/4 -18 UNEF-2A | 34,1<br>1.34 |
| 24 | 46,6<br>1.83 | 1"3/8 -18 UNEF-2A | 35,7<br>1.40 |
| 28 | 53,4<br>2.10 | 1"5/8 -18 UNEF-2A | 35,7<br>1.40 |
| 32 | 60,1<br>2.37 | 1"7/8 -16 UN-2A | 37,3<br>1.47 |
| 36 | 66,3<br>2.61 | 2" 1/16 -16 UN-2A | 37,3<br>1.47 |
| 40 | 72,5<br>2.85 | 2"5/16 -16 UN-2A | 37,3<br>1.47 |

Dimensions are mm. over inches

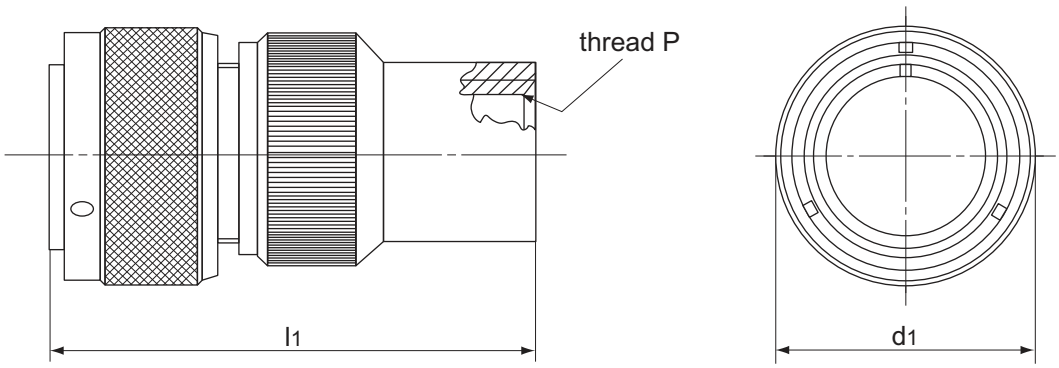
Straight plug with PG (DIN 40430) threaded backshell.




| Shell Size | $d_1$ max. | $l_1$ max. | P thread |
|---|---|---|---|
| 10SL | 22,8<br>0.90 | 53<br>2.09 | PG (DIN 40430)<br><br>Dimension of the P thread has to be decided when B/S is ordered. |
| 14S | 29,2<br>1.15 | 58<br>2.28 | |
| 16S | 32<br>1.26 | 58<br>2.28 | |
| 16 | 32<br>1.26 | 75<br>2.95 | |
| 18 | 36,5<br>1.44 | 82<br>3.23 | |
| 20 | 39,9<br>1.57 | 82<br>3.23 | |
| 22 | 43,1<br>1.70 | 82<br>3.23 | |
| 24 | 46,6<br>1.83 | 92<br>3.62 | |
| 28 | 53,4<br>2.10 | 92<br>3.62 | |
| 32 | 60,1<br>2.37 | 92<br>3.62 | |
| 36 | 66,3<br>2.61 | 92<br>3.62 | |
| 40 | 72,5<br>2.85 | 92<br>3.62 | |

Connector P/N has to be defined on the basis of customer need (example: connector with grommet, gaskets, etc.)
Dimensions are mm. over inches

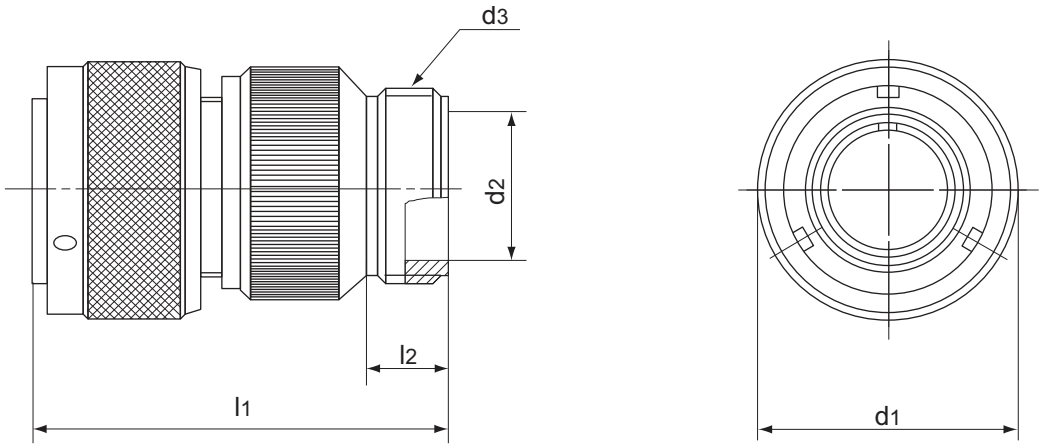
Straight plug with UNI ISO 7/1 Rp (GAS) threaded backshell.




| Shell Size | $d_1$ max. | $l_1$ max. | UNI ISO 7/1 Rp P thread |
|---|---|---|---|
| 10SL | 22,8<br>0.90 | 53<br>2.09 | Dimension of the P thread has to be decided when B/S is ordered. |
| 14S | 29,2<br>1.15 | 58<br>2.28 | |
| 16S | 32<br>1.26 | 58<br>2.28 | |
| 16 | 32<br>1.26 | 75<br>2.95 | |
| 18 | 36,5<br>1.44 | 75<br>2.95 | |
| 20 | 39,9<br>1.57 | 75<br>2.95 | |
| 22 | 43,1<br>1.70 | 78<br>3.07 | |
| 24 | 46,6<br>1.83 | 78<br>3.07 | |
| 28 | 53,4<br>2.10 | 82<br>3.23 | |
| 32 | 60,1<br>2.37 | 84<br>3.31 | |
| 36 | 66,3<br>2.61 | 86<br>3.38 | |
| 40 | 72,5<br>2.85 | 95<br>3.74 | |

Connector P/N has to be defined on the basis of customer need (example: connector with grommet, gaskets, etc.)
Dimensions are mm. over inches

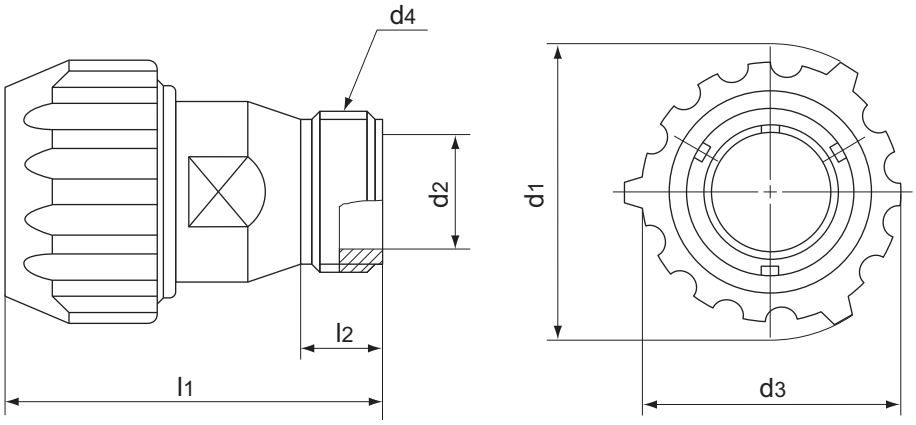
Straight plug with backshell. CIRG type has "RFI" shield spring (for shielding characteristics see page 12). R type has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ +0,1 -0 | $d_3$ Thread in inches | $l_1$ max. | $l_2$ min. |
|---|---|---|---|---|---|
| 10SL | 22,8 | 10,4 | 5/8 -24 UNEF-2A | 43 | 9,5 |
| | 0.90 | 0.41 | | 1.69 | 0.37 |
| 14S | 29,2 | 13,2 | 3/4 -20 UNEF-2A | 47 | 9,5 |
| | 1.15 | 0.52 | | 1.85 | 0.37 |
| 16S | 32 | 16,2 | 7/8 -20 UNEF-2A | 47 | 9,5 |
| | 1.26 | 0.64 | | 1.85 | 0.37 |
| 16 | 32 | 16,2 | 7/8 -20 UNEF-2A | 58 | 9,5 |
| | 1.26 | 0.64 | | 2.28 | 0.37 |
| 18 | 36,5 | 19,2 | 1" -20 UNEF-2A | 58 | 9,5 |
| | 1.44 | 0.75 | | 2.28 | 0.37 |
| 20 | 39,9 | 22 | 1"3/16 -18 UNEF-2A | 58 | 9,5 |
| | 1.57 | 0.87 | | 2.28 | 0.37 |
| 22 | 43,1 | 24,5 | 1"3/16 -18 UNEF-2A | 59 | 9,5 |
| | 1.70 | 0.96 | | 2.32 | 0.37 |
| 24 | 46,6 | 27,8 | 1"7/16 -18 UNEF-2A | 61 | 9,5 |
| | 1.83 | 1.09 | | 2.40 | 0.37 |
| 28 | 53,4 | 31,2 | 1"7/16 -18 UNEF-2A | 67 | 9,5 |
| | 2.10 | 1.23 | | 2.64 | 0.37 |
| 32 | 60,1 | 37,8 | 1"3/4 -18 UNS-2A | 71 | 11 |
| | 2.37 | 1.49 | | 2.79 | 0.43 |
| 36 | 66,3 | 45 | 2" -18 UNS-2A | 71 | 11,8 |
| | 2.61 | 1.77 | | 2.79 | 0.46 |
| 40 | 72,5 | 51,2 | 2"1/4 -16 UN-2A | 86 | 11,8 |
| | 2.85 | 2.01 | | 3.38 | 0.46 |

Dimensions are mm. over inches

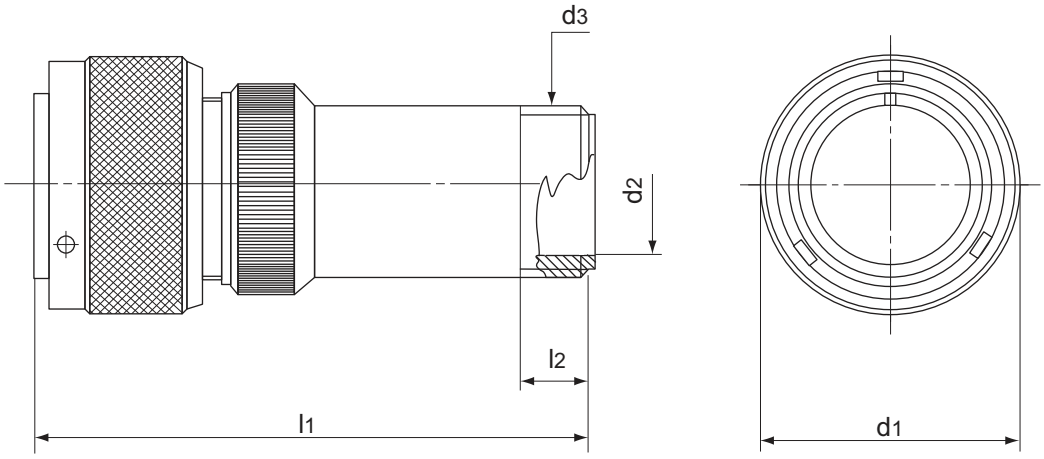
Straight plug with backshell and rubber covered coupling nut for protection against dust and impact. RGG type has an individual wire sealing grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ +0,1 -0 | $d_3$ — | $d_4$ Thread in inches | $l_1$ max. | $l_2$ min. |
|---|---|---|---|---|---|---|
| 10SL | 33,5 | 10,4 | 28,5 | 5/8 -24 UNEF-2A | 58 | 9,5 |
| | 1.32 | 0.41 | 1.12 | | 2.28 | 0.37 |
| 14S | 40,2 | 13,2 | 35,2 | 3/4 -20 UNEF-2A | 58 | 9,5 |
| | 1.58 | 0.52 | 1.38 | | 2.28 | 0.37 |
| 16 | 44 | 16,2 | 38,9 | 7/8 -20 UNEF-2A | 72 | 9,5 |
| | 1.73 | 0.64 | 1.53 | | 2.83 | 0.37 |
| 18 | 49 | 19,8 | 43,5 | 1" -20 UNEF-2A | 72 | 9,5 |
| | 1.93 | 0.78 | 1.71 | | 2.83 | 0.37 |
| 20 | 51,5 | 22 | 46 | 1"3/16 -18 UNEF-2A | 73 | 9,5 |
| | 2.03 | 0.87 | 1.81 | | 2.87 | 0.37 |
| 22 | 56 | 24,5 | 50,5 | 1"3/16 -18 UNEF-2A | 73 | 9,5 |
| | 2.20 | 0.96 | 1.99 | | 2.87 | 0.37 |
| 24 | 60 | 27,8 | 54 | 1"7/16 -18 UNEF-2A | 81 | 9,5 |
| | 2.36 | 1.09 | 2.12 | | 3.19 | 0.37 |
| 28 | 67 | 31,2 | 61 | 1"7/16 -18 UNEF-2A | 81 | 9,5 |
| | 2.64 | 1.23 | 2.40 | | 3.19 | 0.37 |
| 32 | 76 | 37,8 | 67,6 | 1"3/4 -18 UNS-2A | 82 | 11 |
| | 2.99 | 1.49 | 2.66 | | 3.23 | 0.43 |
| 36 | 82,3 | 45 | 74,3 | 2" -18 UNS-2A | 84 | 11,8 |
| | 3.24 | 1.77 | 2.92 | | 3.31 | 0.46 |
| 40 | 88 | 51,2 | 80 | 2"1/4 -16 UN-2A | 94 | 11,8 |
| | 3.46 | 2.01 | 3.15 | | 3.70 | 0.46 |

Dimensions are mm. over inches

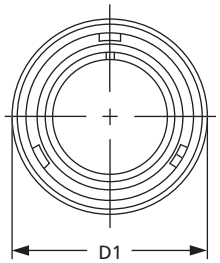
Straight plug with long backshell. RL tpe has an individual wire sealing grommet. AL and LA types have no wire sealing grommet.

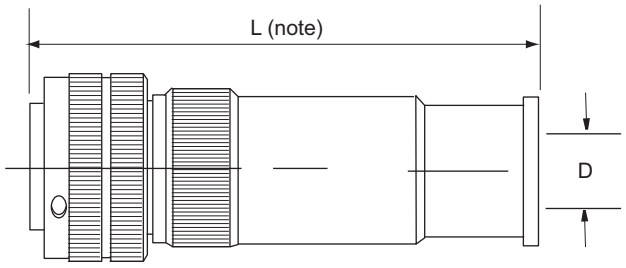



| Shell Size | $d_1$ max. | $d_2$ +0,1 -0 | $d_3$ Thread in inches | $l_1$ max. | $l_2$ min. |
|---|---|---|---|---|---|
| 10SL | 22,8 | 8,5 | 5/8 -24 UNEF-2A | 71 | 9,5 |
| | 0.90 | 0.33 | | 2.79 | 0.37 |
| 14S | 29,2 | 11,7 | 3/4 -20 UNEF-2A | 71 | 9,5 |
| | 1.15 | 0.46 | | 2.79 | 0.37 |
| 16S | 32 | 13,9 | 7/8 -20 UNEF-2A | 71 | 9,5 |
| | 1.26 | 0.55 | | 2.79 | 0.37 |
| 16 | 32 | 13,9 | 7/8 -20 UNEF-2A | 87 | 9,5 |
| | 1.26 | 0.55 | | 3.42 | 0.37 |
| 18 | 36,5 | 16,9 | 1" -20 UNEF-2A | 87 | 9,5 |
| | 1.44 | 0.66 | | 3.42 | 0.37 |
| 20 | 39,9 | 20,9 | 1"3/16 -18 UNEF-2A | 87 | 9,5 |
| | 1.57 | 0.82 | | 3.42 | 0.37 |
| 22 | 43,1 | 20,9 | 1"3/16 -18 UNEF-2A | 87 | 9,5 |
| | 1.70 | 0.82 | | 3.42 | 0.37 |
| 24 | 46,6 | 25,9 | 1"7/16 -18 UNEF-2A | 87 | 9,5 |
| | 1.83 | 1.02 | | 3.42 | 0.37 |
| 28 | 53,4 | 25,9 | 1"7/16 -18 UNEF-2A | 95 | 9,5 |
| | 2.10 | 1.02 | | 3.74 | 0.37 |
| 32 | 60,1 | 32 | 1"3/4 -18 UNS-2A | 95 | 11 |
| | 2.37 | 1.26 | | 3.74 | 0.43 |
| 36 | 66,3 | 36,9 | 2" -18 UNS-2A | 95 | 11,8 |
| | 2.61 | 1.45 | | 3.74 | 0.46 |
| 40 | 72,5 | 44,9 | 2"1/4 -16 UN-2A | 95 | 11,8 |
| | 2.85 | 1.77 | | 3.74 | 0.46 |

Dimensions are mm. over inches

Plug for terminating flexible rubber hose. Long metal backshell with rear lip suitable for flexible rubber conduit (hose) being secured to the backshell by a metal band or hose clamp.




Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

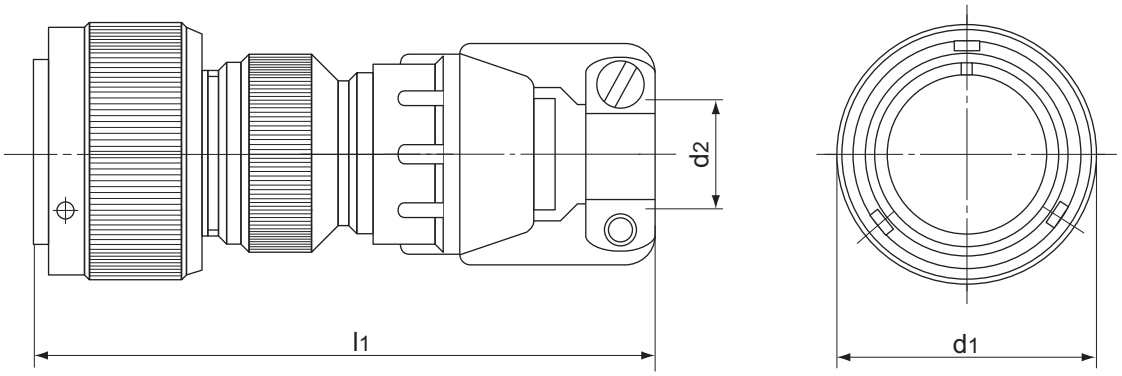
| Shell Size | Suffix in Connector Part Number | Conduit Inner Diameter | D Maximum |
|---|---|---|---|
| 10SL | (045) | 11,4<br>.45 | 7,5<br>.30 |
| 14 | (049) | 12,5<br>.49 | 7,5<br>.30 |
| 18 | | 12,5<br>.49 | 7,5<br>.30 |
| 20 | | 12,5<br>.49 | 7,5<br>.30 |
| 22 | (053) | 13,5<br>.53 | 10,4<br>.41 |
| 10SL | (075) | 19,1<br>.75 | 15,9<br>.63 |
| 18 | | 19,1<br>.75 | 15,9<br>.63 |
| 14S | (084) | 21,3<br>.84 | 17,5<br>.69 |
| 20 | | 21,3<br>.84 | 17,5<br>.69 |
| 10SL | (106) | 26,9<br>1.06 | 22,2<br>.88 |
| 20 | | 26,9<br>1.06 | 23,9<br>.94 |
| 32 | | 26,9<br>1.06 | 23,9<br>.94 |
| 36 | | 26,9<br>1.06 | 22,2<br>.88 |

| Shell Size | Suffix in Connector Part Number | Conduit Inner Diameter | D Maximum |
|---|---|---|---|
| 28 | (110) | 27,9<br>1.10 | 25,6<br>1.01 |
| 32 | | 27,9<br>1.10 | 25,6<br>1.01 |
| 32 | (122) | 31,0<br>1.22 | 28,6<br>1.13 |
| 32 | (138) | 35,1<br>1.38 | 29,4<br>1.16 |
| 36 | | 35,1<br>1.38 | 29,4<br>1.16 |
| 40 | | 35,1<br>1.38 | 29,4<br>1.16 |
| 36 | (157) | 39,9<br>1.57 | 37,8<br>1.49 |
| 32 | (197) | 50,0<br>1.97 | 45,2<br>1.78 |
| 36 | | 50,0<br>1.97 | 45,2<br>1.78 |
| 40 | | 50,0<br>1.97 | 45,2<br>1.78 |

Note: Suffix in connector part number represents conduit inner diameter.

Dimensions are mm. over inches

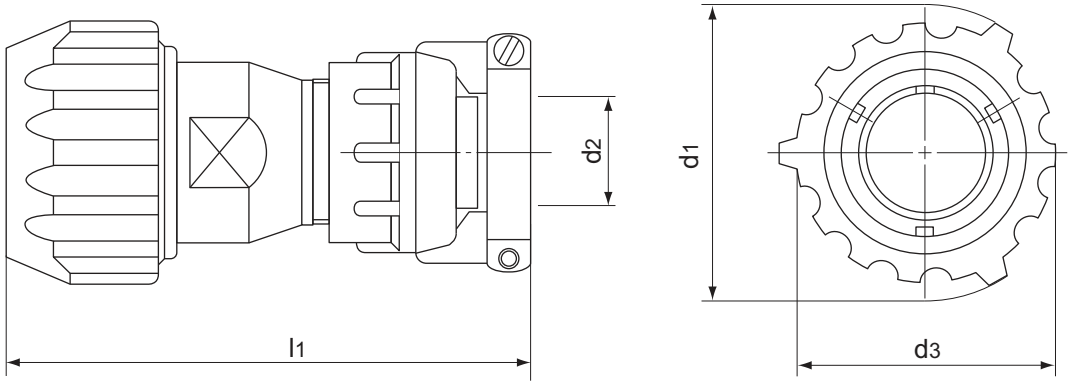
Straight plug with cable clamp and seal for jacketed cables. CFZ type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ Open | $d_2$ Closed | $l_1$ max. |
|---|---|---|---|---|
| 10SL | 22,8<br>0.90 | 7,93<br>.312 | 2,38<br>.094 | 73<br>2.87 |
| 14S | 29,2<br>1.15 | 11,12<br>.438 | 6,35<br>.25 | 77<br>3.03 |
| 16S | 32<br>1.26 | 13,48<br>.531 | 8,0<br>.315 | 77<br>3.03 |
| 16 | 32<br>1.26 | 13,48<br>.531 | 8,0<br>.315 | 88<br>3.46 |
| 18 | 36,5<br>1.44 | 15,87<br>.625 | 9,6<br>.378 | 91<br>3.58 |
| 20 | 39,9<br>1.57 | 19,0<br>.748 | 11,3<br>.445 | 91<br>3.58 |
| 22 | 43,1<br>1.70 | 19,0<br>.748 | 11,3<br>.445 | 92<br>3.62 |
| 24 | 46,6<br>1.83 | 23,8<br>.938 | 15,5<br>.610 | 97<br>3.82 |
| 28 | 53,4<br>2.10 | 23,8<br>.938 | 15,5<br>.610 | 103<br>4.05 |
| 32 | 60,1<br>2.37 | 31,75<br>1.250 | 23,4<br>.921 | 113<br>4.45 |
| 36 | 66,3<br>2.61 | 35,0<br>1.378 | 23,4<br>.921 | 120<br>4.72 |
| 40 | 72,5<br>2.85 | 41,25<br>1.625 | 29,9<br>1.177 | 135<br>5.31 |

Dimensions are mm. over inches

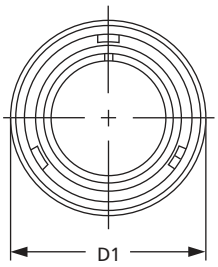
Straight plug with cable clamp for jacketed cable and rubber covered coupling nut for protection against dust and impact. CFZGG type also has an individual wire sealing grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.

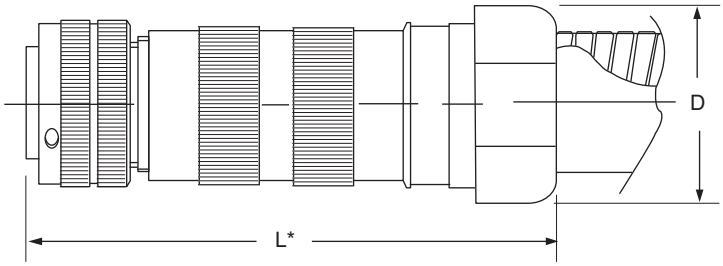



| Shell Size | $d_1$ | $d_2$ | | $d_3$ | $l_1$ |
|---|---|---|---|---|---|
| | — | Open | Closed | — | max. |
| 10SL | 33,5 | 7,93 | 2,38 | 28,5 | 89 |
| | 1.32 | .312 | .094 | 1.12 | 3.50 |
| 14S | 40,2 | 11,1 | 6.35 | 32,5 | 89 |
| | 1.58 | .438 | .25 | 1.28 | 3.50 |
| 16 | 44 | 13,48 | 8,0 | 38,9 | 103 |
| | 1.73 | .531 | .315 | 1.53 | 4.05 |
| 18 | 49 | 15,87 | 9,6 | 43,5 | 106 |
| | 1.93 | .625 | .378 | 1.71 | 4.17 |
| 20 | 51,5 | 19,0 | 11,3 | 46 | 107 |
| | 2.03 | .748 | .445 | 1.81 | 4.21 |
| 22 | 56 | 19,0 | 11,3 | 50,5 | 107 |
| | 2.20 | .748 | .445 | 1.99 | 4.21 |
| 24 | 60 | 23,8 | 15,5 | 54 | 118 |
| | 2.36 | .938 | .610 | 2.12 | 4.64 |
| 28 | 67 | 23,8 | 15,5 | 61 | 118 |
| | 2.64 | .938 | .610 | 2.40 | 4.64 |
| 32 | 76 | 31,75 | 23,4 | 67,6 | 127 |
| | 2.99 | 1,250 | .921 | 2.66 | 5.00 |
| 36 | 82,3 | 35,0 | 23,4 | 74,3 | 134 |
| | 3.24 | 1.378 | .921 | 2.92 | 5.27 |
| 40 | 88 | 41,25 | 29,9 | 80 | 144 |
| | 3.46 | 1,625 | 1,177 | 3.15 | 5.67 |

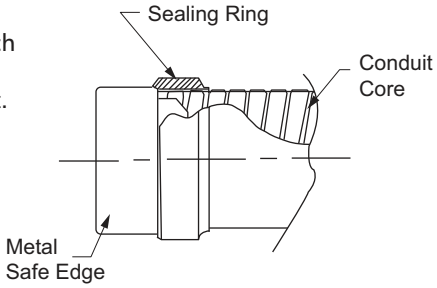
Dimensions are mm. over inches

Plug for terminating conduit. Includes the backshell hardware suitable for flexible metal core *Electri-flex conduit*. Includes a wire sealing grommet and compression ring.




*Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.



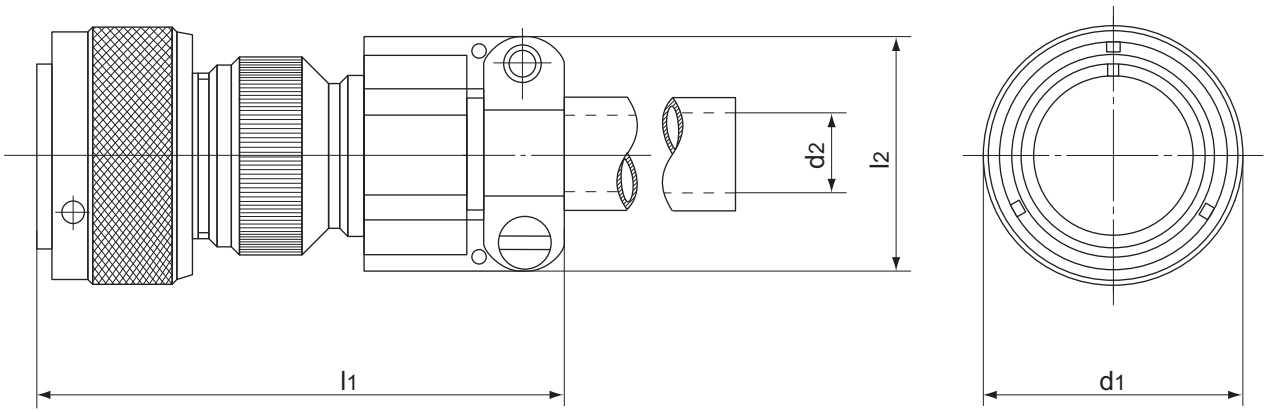

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| Electri-Flex Conduit Trade Size | Shell Size | Suffix in Connector Part Number | L CIR06 Approximate | D Approximate |
|---|---|---|---|---|
| 3/4 | 20 | (075) | 106,9<br>4.21 | 41,9<br>1.65 |
| | 24 | (075) | 137,9<br>5.43 | 41,9<br>1.65 |
| | 36 | (075) | 138,3<br>5.44 | 41,9<br>1.65 |
| 100 | 20 | (100) | 111,2<br>4.38 | 47,6<br>1.88 |

Note: For other sizes consult our Customer Service Department.

Dimensions are mm. over inches

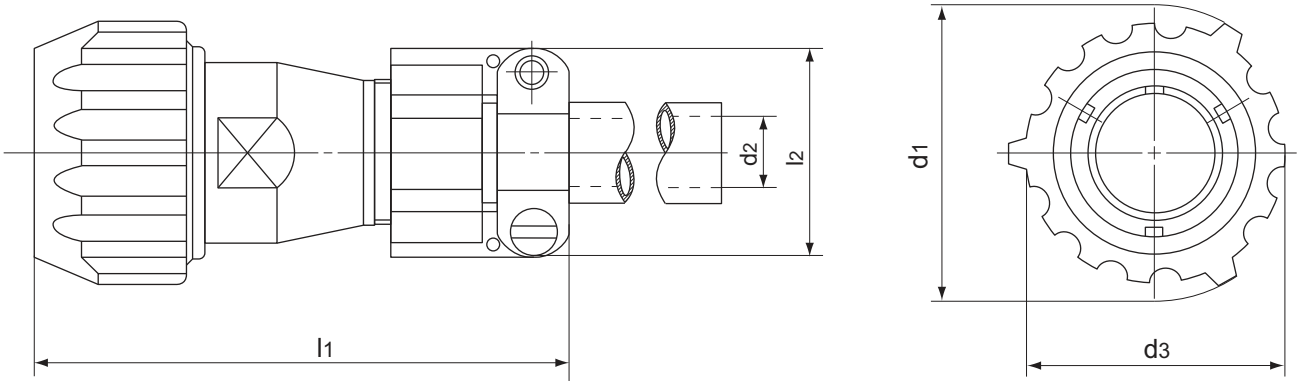
Straight plug with an individual wire sealing grommet and cable clamp with bushing. AF type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ * max. | $l_1$ max. | $l_2$ max. |
|---|---|---|---|---|
| 10SL | 22,8<br>0.90 | 5,6<br>0.22 | 64<br>2.52 | 22,7<br>0.89 |
| 14S | 29,2<br>1.15 | 7,9<br>0.31 | 69<br>2.72 | 27,5<br>1.08 |
| 16S | 32<br>1.26 | 11<br>0.43 | 71<br>2.79 | 30<br>1.18 |
| 16 | 32<br>1.26 | 11<br>0.43 | 82<br>3.23 | 30<br>1.18 |
| 18 | 36,5<br>1.44 | 14,2<br>0.56 | 82<br>3.23 | 32,2<br>1.27 |
| 20 | 39,9<br>1.57 | 15,8<br>0.62 | 82<br>3.23 | 37,5<br>1.48 |
| 22 | 43,1<br>1.70 | 15,8<br>0.62 | 83<br>3.27 | 37,5<br>1.48 |
| 24 | 46,6<br>1.83 | 19<br>0.75 | 87<br>3.42 | 43,3<br>1.70 |
| 28 | 53,4<br>2.10 | 19<br>0.75 | 93<br>3.66 | 43,3<br>1.70 |
| 32 | 60,1<br>2.37 | 23,8<br>0.94 | 99<br>3.90 | 51,7<br>2.03 |
| 36 | 66,3<br>2.61 | 31,7<br>1.25 | 100<br>3.94 | 58<br>2.28 |
| 40 | 72,5<br>2.85 | 34,9<br>1.37 | 128<br>5.04 | 68,5<br>2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

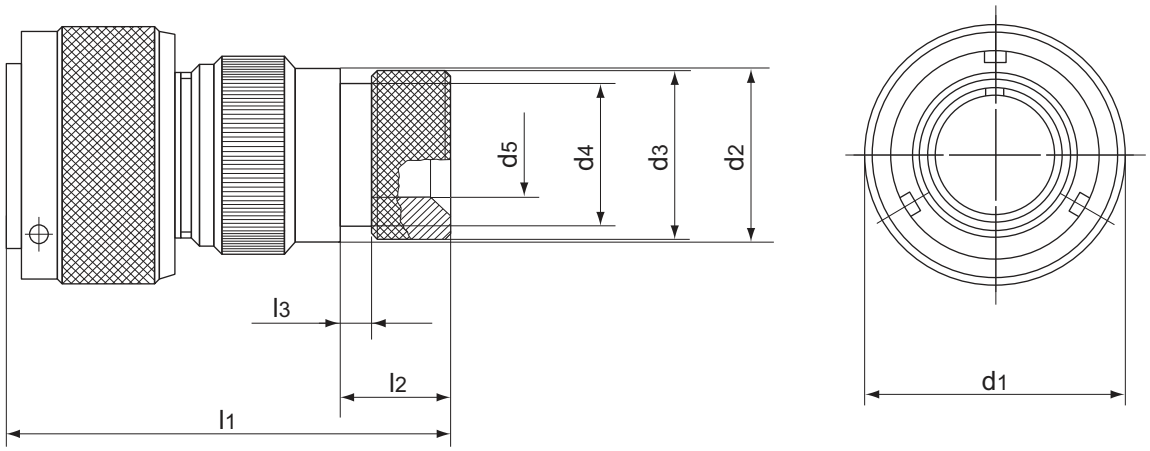
Straight plug with an individual wire sealing grommet, cable clamp with bushing and rubber covered coupling nut for protection against dust and impact. AFGG type has no grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ * max. | $d_3$ max. | $l_1$ max. | $l_2$ max. |
|---|---|---|---|---|---|
| 10SL | 33,5 | 5,6 | 28,5 | 77 | 22,7 |
| | 1.32 | 0.22 | 1.12 | 3.03 | 0.89 |
| 14S | 40,2 | 7,9 | 35,2 | 79 | 27,5 |
| | 1.58 | 0.31 | 1.38 | 3.11 | 1.08 |
| 16 | 44 | 11 | 38,9 | 99 | 30 |
| | 1.73 | 0.43 | 1.53 | 3.90 | 1.18 |
| 18 | 49 | 14,2 | 43,5 | 99 | 32,2 |
| | 1.93 | 0.56 | 1.71 | 3.90 | 1.27 |
| 20 | 51,5 | 15,8 | 46 | 95 | 37,5 |
| | 2.03 | 0.62 | 1.81 | 3.74 | 1.48 |
| 22 | 56 | 15,8 | 50,5 | 95 | 37,5 |
| | 2.20 | 0.62 | 1.99 | 3.74 | 1.48 |
| 24 | 60 | 19 | 54 | 105 | 43,3 |
| | 2.36 | 0.75 | 2.12 | 4.13 | 1.70 |
| 28 | 67 | 19 | 61 | 105 | 43,3 |
| | 2.64 | 0.75 | 2.40 | 4.13 | 1.70 |
| 32 | 76 | 23,8 | 67,6 | 110 | 51,7 |
| | 2.99 | 0.94 | 2.66 | 4.33 | 2.03 |
| 36 | 82,3 | 31,7 | 74,3 | 112 | 58 |
| | 3.24 | 1.25 | 2.92 | 4.41 | 2.28 |
| 40 | 88 | 34,9 | 80 | 135 | 68,5 |
| | 3.46 | 1.37 | 3.15 | 5.31 | 2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

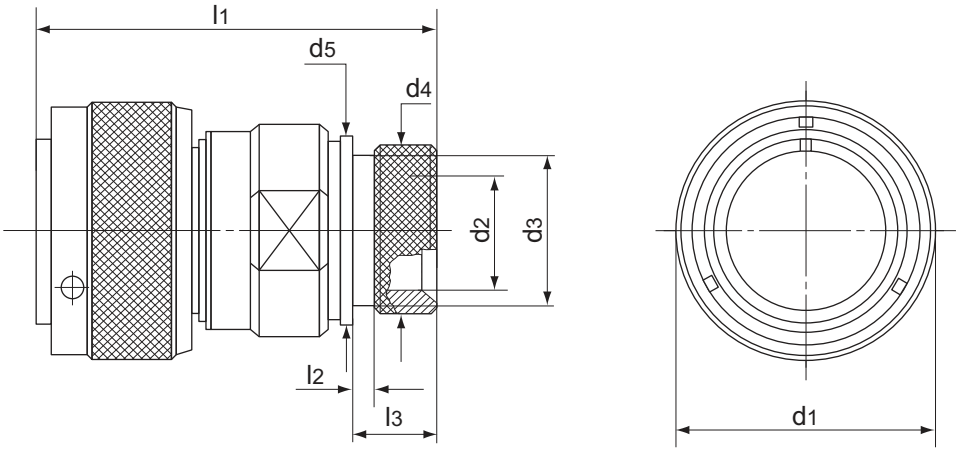
Straight plug with an individual wire sealing grommet and backshell for heat shrinkable tubing. AG type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ ±0,2 | $d_3$ ±0,2 | $d_4$ max. | $d_5$ ±0,1 | $l_1$ max. | $l_2$ ±0,1 | $l_3$ ±0,1 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 17 | 15,5 | 13,3 | 7,9 | 48 | 11,7 | 3,5 |
| | 0.90 | 0.67 | 0.61 | 0.52 | 0.31 | 1.89 | 0.46 | 0.14 |
| 14S | 29,2 | 20,1 | 19,1 | 17 | 10,8 | 48 | 11,7 | 3,5 |
| | 1.15 | 0.79 | 0.75 | 0.67 | 0.42 | 1.89 | 0.46 | 0.14 |
| 16S | 32 | 23,5 | 23,9 | 21,9 | 13,7 | 48 | 11,7 | 3,5 |
| | 1.26 | 0.92 | 0.94 | 0.86 | 0.54 | 1.89 | 0.46 | 0.14 |
| 16 | 32 | 23,5 | 23,9 | 21,9 | 13,7 | 60 | 11,5 | 3,5 |
| | 1.26 | 0.92 | 0.94 | 0.86 | 0.54 | 2.36 | 0.45 | 0.14 |
| 18 | 36,5 | 26,5 | 23,9 | 21,9 | 14,8 | 60 | 11,5 | 3,5 |
| | 1.44 | 1.04 | 0.94 | 0.86 | 0.58 | 2.36 | 0.45 | 0.14 |
| 20 | 39,9 | 30,2 | 29,6 | 26,2 | 18,9 | 65 | 12,4 | 3,5 |
| | 1.57 | 1.19 | 1.16 | 1.03 | 0.74 | 2.56 | 0.49 | 0.14 |
| 22 | 43,1 | 33,6 | 29,6 | 26,2 | 21 | 65 | 12,4 | 3,5 |
| | 1.70 | 1.32 | 1.16 | 1.03 | 0.83 | 2.56 | 0.49 | 0.14 |
| 24 | 46,6 | 36,1 | 37,8 | 34,5 | 24,8 | 65 | 12,7 | 3,5 |
| | 1.83 | 1.42 | 1.49 | 1.36 | 0.98 | 2.56 | 0.50 | 0.14 |
| 28 | 53,4 | 41,4 | 37,8 | 34,5 | 27,2 | 65 | 12,7 | 3,5 |
| | 2.10 | 1.63 | 1.49 | 1.36 | 1.07 | 2.56 | 0.50 | 0.14 |
| 32 | 60,1 | 48,6 | 47,8 | 43,6 | 33,5 | 70 | 15,2 | 3,5 |
| | 2.37 | 1.91 | 1.88 | 1.72 | 1.32 | 2.75 | 0.60 | 0.14 |
| 36 | 66,3 | 54,8 | 47,8 | 43,6 | 38,7 | 75 | 15,2 | 3,5 |
| | 2.61 | 2.16 | 1.88 | 1.72 | 1.52 | 2.95 | 0.60 | 0.14 |
| 40 | 72,5 | 60,9 | 57,8 | 52,6 | 48,2 | 77 | 15,2 | 3,5 |
| | 2.85 | 2.40 | 2.27 | 2.07 | 1.90 | 3.03 | 0.60 | 0.14 |

Dimensions are mm. over inches

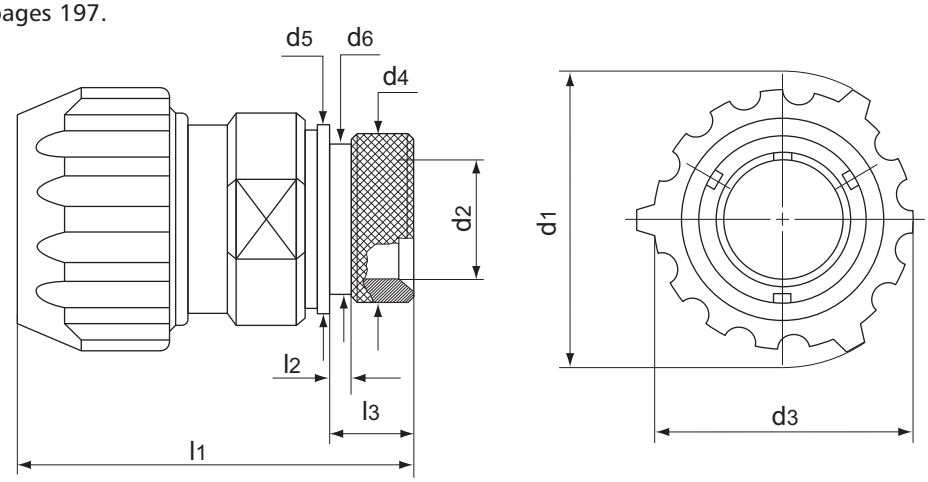
Straight plug with an individual wire sealing grommet and a two piece swivel backshell for heat shrinkable tubing. AG2 type has no wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ ±0,1 | $d_3$ ±0,1 | $d_4$ — | $d_5$ ±0,1 | $l_1$ * ~ | $l_2$ ±0,1 | $l_3$ ±0,1 |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 8,6 | 13 | 15,5 | 17 | 49 | 3,5 | 11,7 |
| | 0.90 | 0.34 | 0.51 | 0.61 | 0.67 | 1.93 | 0.14 | 0.46 |
| 14S | 29,2 | 11,2 | 16,8 | 19,1 | 20,1 | 49 | 3,5 | 11,7 |
| | 1.15 | 0.44 | 0.66 | 0.75 | 0.79 | 1.93 | 0.14 | 0.46 |
| 16S | 32 | 14 | 21,7 | 23,9 | 23,5 | 49,8 | 3,5 | 11,7 |
| | 1.26 | 0.55 | 0.85 | 0.94 | 0.92 | 1.96 | 0.14 | 0.46 |
| 16 | 32 | 14 | 21,7 | 23,9 | 23,5 | 59,3 | 3,5 | 11,5 |
| | 1.26 | 0.55 | 0.85 | 0.94 | 0.92 | 2.33 | 0.14 | 0.45 |
| 18 | 36,5 | 16,4 | 21,7 | 23,9 | 26,5 | 58,8 | 3,5 | 11,5 |
| | 1.44 | 0.64 | 0.85 | 0.94 | 1.04 | 2.31 | 0.14 | 0.45 |
| 20 | 39,9 | 19,3 | 26,1 | 29,6 | 30,2 | 59,5 | 3,5 | 12,4 |
| | 1.57 | 0.76 | 1.03 | 1.16 | 1.19 | 2.34 | 0.14 | 0.49 |
| 22 | 43,1 | 22 | 26,1 | 29,6 | 33,6 | 59,5 | 3,5 | 12,4 |
| | 1.70 | 0.86 | 1.03 | 1.16 | 1.32 | 2.34 | 0.14 | 0.49 |
| 24 | 46,6 | 25 | 34,3 | 37,8 | 36,1 | 62,1 | 3,5 | 12,7 |
| | 1.83 | 0.98 | 1.35 | 1.49 | 1.42 | 2.44 | 0.14 | 0.50 |
| 28 | 53,4 | 28 | 34,3 | 37,8 | 41,4 | 63,9 | 3,5 | 12,7 |
| | 2.10 | 1.10 | 1.35 | 1.49 | 1.63 | 2.51 | 0.14 | 0.50 |
| 32 | 60,1 | 34,8 | 43,4 | 47,8 | 48,6 | 66,2 | 3,5 | 15,2 |
| | 2.37 | 1.37 | 1.71 | 1.88 | 1.91 | 2.61 | 0.14 | 0.60 |
| 36 | 66,3 | 38,7 | 43,4 | 47,8 | 54,8 | 66,2 | 3,5 | 15,2 |
| | 2.61 | 1.52 | 1.71 | 1.88 | 2.16 | 2.61 | 0.14 | 0.60 |
| 40 | 72,5 | 48,2 | 52,6 | 57,8 | 61 | 66,5 | 3,5 | 15,5 |
| | 2.85 | 1.90 | 2.07 | 2.27 | 2.40 | 2.62 | 0.14 | 0.61 |

* Nominal values after coupling the backshell
Dimensions are mm. over inches

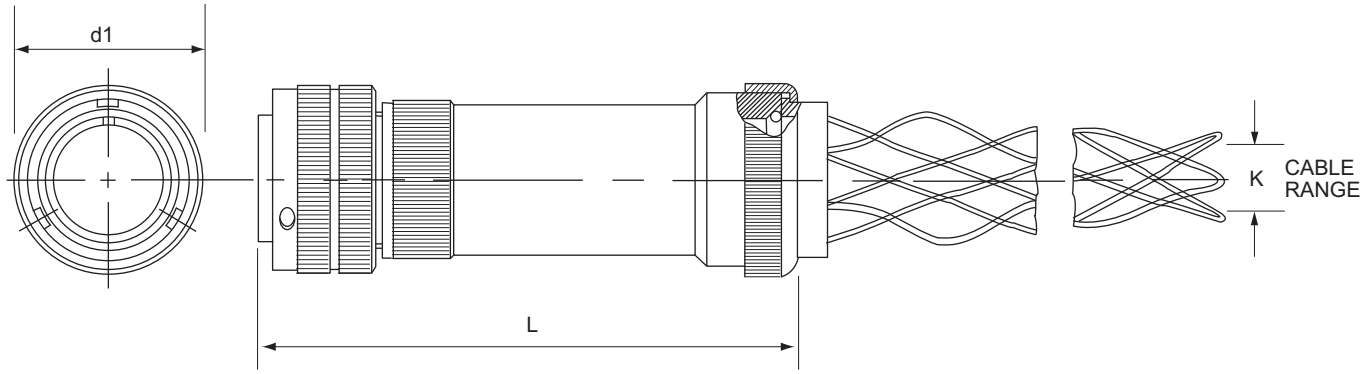
Straight plug with an individual wire sealing grommet and a two piece swivel backshell for heat shrinkable tubing plus a rubber covered coupling nut for protection against dust and impact. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ ±0,1 | $d_3$ — | $d_4$ — | $d_5$ ±0,1 | $d_6$ ±0,1 | $l_1$ * — | $l_2$ ±0,1 | $l_3$ ±0,1 |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 33,5 | 8,6 | 28,5 | 15,5 | 17 | 13 | 50 | 3,5 | 11,7 |
| | 1.32 | 0.34 | 1.12 | 0.61 | 0.67 | 0.51 | 1.97 | 0.14 | 0.46 |
| 14S | 40,2 | 11,2 | 35,2 | 19,1 | 20,1 | 16,8 | 50 | 3,5 | 11,7 |
| | 1.58 | 0.44 | 1.38 | 0.75 | 0.79 | 0.66 | 1.97 | 0.14 | 0.46 |
| 16 | 44 | 14 | 38,9 | 23,9 | 23,5 | 21,7 | 59,5 | 3,5 | 11,5 |
| | 1.73 | 0.55 | 1.53 | 0.94 | 0.92 | 0.85 | 2.34 | 0.14 | 0.45 |
| 18 | 49 | 16,4 | 43,5 | 23,9 | 26,5 | 21,7 | 59 | 3,5 | 11,5 |
| | 1.93 | 0.64 | 1.71 | 0.94 | 1.04 | 0.85 | 2.32 | 0.14 | 0.45 |
| 20 | 51,5 | 19,3 | 46 | 29,6 | 30,2 | 26,1 | 60,5 | 3,5 | 12,4 |
| | 2.03 | 0.76 | 1.81 | 1.16 | 1.19 | 1.03 | 2.38 | 0.14 | 0.49 |
| 22 | 56 | 22 | 50,5 | 29,6 | 33,6 | 26,1 | 60,5 | 3,5 | 12,4 |
| | 2.20 | 0.86 | 1.99 | 1.16 | 1.32 | 1.03 | 2.38 | 0.14 | 0.49 |
| 24 | 60 | 25 | 54 | 37,8 | 36,1 | 34,3 | 64,5 | 3,5 | 12,7 |
| | 2.36 | 0.98 | 2.12 | 1.49 | 1.42 | 1.35 | 2.54 | 0.14 | 0.50 |
| 28 | 67 | 28 | 61 | 37,8 | 41,4 | 34,3 | 66 | 3,5 | 12,7 |
| | 2.64 | 1.10 | 2.40 | 1.49 | 1.63 | 1.35 | 2.60 | 0.14 | 0.50 |
| 32 | 76 | 34,8 | 67,6 | 47,8 | 48,6 | 43,4 | 70 | 3,5 | 15,2 |
| | 2.99 | 1.37 | 2.66 | 1.88 | 1.91 | 1.71 | 2.75 | 0.14 | 0.60 |
| 36 | 82,3 | 38,7 | 74,3 | 47,8 | 54,8 | 43,4 | 70 | 3,5 | 15,2 |
| | 3.24 | 1.52 | 2.92 | 1.88 | 2.16 | 1.71 | 2.75 | 0.14 | 0.60 |
| 40 | 88 | 48,2 | 80 | 57,8 | 61 | 52,6 | 70 | 3,5 | 15,5 |
| | 3.46 | 1.90 | 3.15 | 2.27 | 2.40 | 2.07 | 2.75 | 0.14 | 0.61 |

* Nominal dimension with tightened backshell
Dimensions are mm. over inches

Plug for terminating jacketed cable. Long LC backshell with internal adapter suitable for various sizes of cable, grommet, compression ring and a cord grip included. LCG same as LC but without the wire sealing grommet and compression ring.

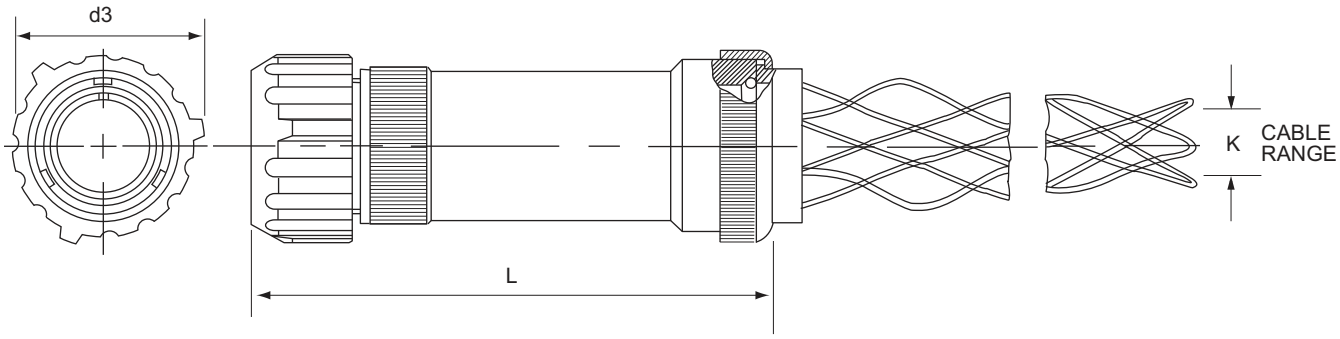



| Shell Size | $D_1$ Max. | L Approximate |
|---|---|---|
| 10SL | 22,8 | 100 |
| | 0.90 | 3.94 |
| 14S | 29,2 | 100 |
| | 1.15 | 3.94 |
| 16S | 33,0 | 100 |
| | 1.30 | 3.94 |
| 16 | 33,0 | 110 |
| | 1.30 | 4.33 |
| 18 | 36,5 | 110 |
| | 1.44 | 4.33 |
| 20 | 39,9 | 116 |
| | 1.57 | 4.57 |
| 22 | 43,1 | 116 |
| | 1.70 | 4.57 |
| 24 | 46,6 | 120 |
| | 1.84 | 4.72 |
| 28 | 53,4 | 129 |
| | 2.10 | 5.08 |
| 32 | 60,1 | 145 |
| | 2.37 | 5.71 |
| 36 | 66,3 | 145 |
| | 2.61 | 5.71 |
| 40 | 72,4 | 145 |
| | 2.85 | 5.71 |

| K Suffix in Connector Part Number | K Cable Range Min. | Max. |
|---|---|---|
| K0 | 6,35 | 9,53 |
| | .250 | .375 |
| K1 | 9,53 | 12,7 |
| | .375 | .500 |
| K2 | 12,7 | 15,87 |
| | .500 | .625 |
| K3 | 15,87 | 19,05 |
| | .625 | .750 |
| K4 | 19,05 | 22,23 |
| | .750 | .875 |
| K5 | 22,23 | 25,4 |
| | .875 | 1.000 |
| K6 | 25,4 | 28,45 |
| | 1.000 | 1.120 |
| K7 | 28,45 | 31,75 |
| | 1.120 | 1.250 |
| K8 | 32,77 | 38,1 |
| | 1.290 | 1.500 |
| K9 | 39.62 | 41,28 |
| | 1.560 | 1.625 |
| K10 | 41.28 | 44,45 |
| | 1.625 | 1.750 |

Dimensions are mm. over inches

Plug for terminating jacketed cable. Rubber covered coupling nut and long LC backshell with internal adapter suitable for various sizes of cable, grommet, compression ring and a cord grip included. LCGGG same as LCGG but without the wire sealing grommet and compression ring.

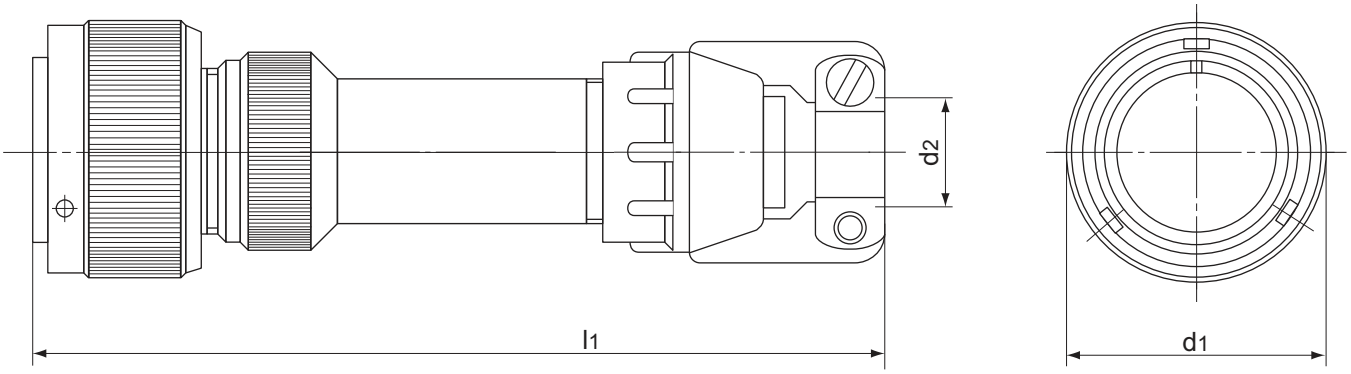



| Shell Size | $D_3$ — | L Approximate |
|---|---|---|
| 10SL | 28,5 | 100 |
| | 1.12 | 3.94 |
| 14S | 32,5 | 100 |
| | 1.28 | 3.94 |
| 16S | N/A | 100 |
| | | 3.94 |
| 16 | 38,9 | 110 |
| | 1.53 | 4.33 |
| 18 | 43,5 | 110 |
| | 1.71 | 4.33 |
| 20 | 46,0 | 116 |
| | 1.81 | 4.57 |
| 22 | 50,5 | 116 |
| | 1.99 | 4.57 |
| 24 | 54,0 | 120 |
| | 2.13 | 4.72 |
| 28 | 61,0 | 129 |
| | 2.4 | 5.08 |
| 32 | 67,6 | 145 |
| | 2.66 | 5.71 |
| 36 | 74,3 | 145 |
| | 2.93 | 5.71 |
| 40 | 80,0 | 145 |
| | 3.15 | 5.71 |

| K Suffix in Connector Part Number | K Cable Range Min. | Max. |
|---|---|---|
| K0 | 6,35 | 9,53 |
| | .250 | .375 |
| K1 | 9,53 | 12,7 |
| | .375 | .500 |
| K2 | 12,7 | 15,87 |
| | .500 | .625 |
| K3 | 15,87 | 19,05 |
| | .625 | .750 |
| K4 | 19,05 | 22,23 |
| | .750 | .875 |
| K5 | 22,23 | 25,4 |
| | .875 | 1.000 |
| K6 | 25,4 | 28,45 |
| | 1.000 | 1.120 |
| K7 | 28,45 | 31,75 |
| | 1.120 | 1.250 |
| K8 | 32,77 | 38,1 |
| | 1.290 | 1.500 |
| K9 | 39.62 | 41,28 |
| | 1.560 | 1.625 |
| K10 | 41.28 | 44,45 |
| | 1.625 | 1.750 |

Dimensions are mm. over inches

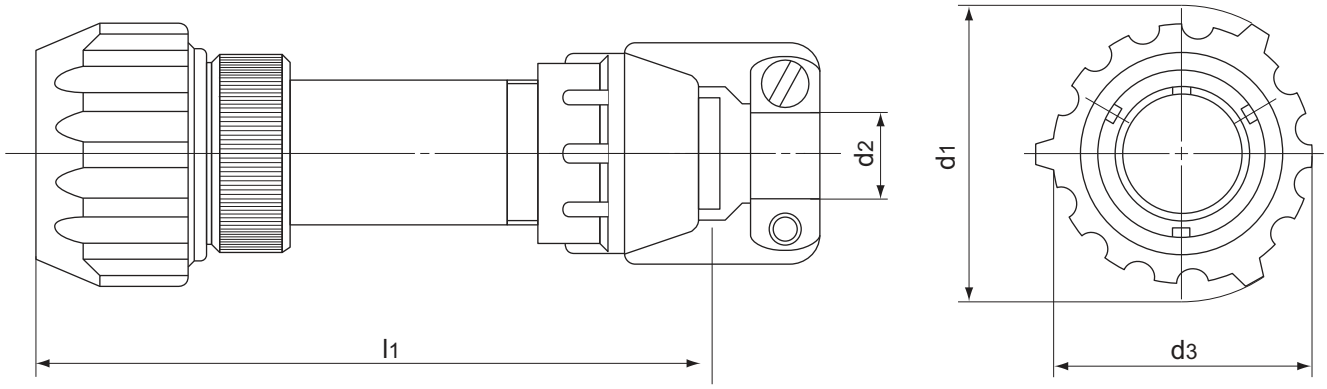
Straight plug with long backshell, cable clamp and seal for jacketed cables. LCFZ - type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ Open | $d_2$ Closed | $l_1$ max. |
|---|---|---|---|---|
| 10SL | 22,8 | 7,93 | 2,38 | 101 |
| | 0.90 | .312 | .094 | 3.98 |
| 14S | 29,2 | 11,12 | 6,35 | 101 |
| | 1.15 | .438 | .25 | 3.98 |
| 16S | 32 | 13,48 | 8,0 | 101 |
| | 1.26 | .531 | .315 | 3.98 |
| 16 | 32 | 13,48 | 8,0 | 114 |
| | 1.26 | .531 | .315 | 4.49 |
| 18 | 36,5 | 15,87 | 9,6 | 119 |
| | 1.44 | .625 | .378 | 4.68 |
| 20 | 39,9 | 19,0 | 11,3 | 119 |
| | 1.57 | .748 | .445 | 4.68 |
| 22 | 43,1 | 19,0 | 11,3 | 119 |
| | 1.70 | .748 | .445 | 4.68 |
| 24 | 46,6 | 23,8 | 15,5 | 124 |
| | 1.83 | .938 | .610 | 4.88 |
| 28 | 53,4 | 23,8 | 15,5 | 130 |
| | 2.10 | .938 | .610 | 5.12 |
| 32 | 60,1 | 31,75 | 23,4 | 137 |
| | 2.37 | 1.259 | .921 | 5.39 |
| 36 | 66,3 | 35,0 | 23,4 | 144 |
| | 2.61 | 1.378 | .921 | 5.67 |
| 40 | 72,5 | 41,25 | 29,9 | 144 |
| | 2.85 | 1.625 | 1.177 | 5.67 |

Dimensions are mm. over inches

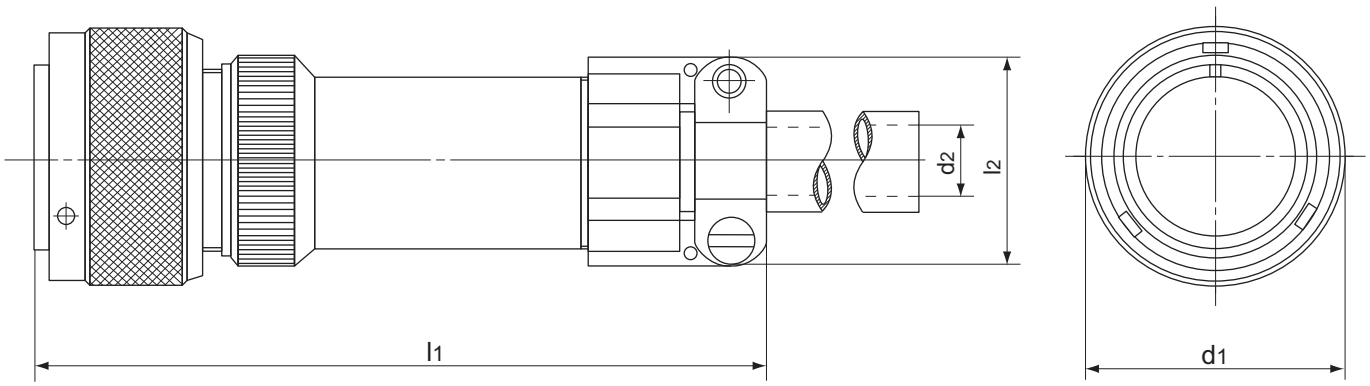
Straight plug with long backshell, cable clamp and seal for jacketed cable plus a rubber covered coupling nut for protection against dust and impact. LCFZGG - type also has an individual wire sealing grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ | $d_2$ | | $d_3$ | $l_1$ |
|---|---|---|---|---|---|
| | — | Open | Closed | — | max. |
| 10SL | 33,5 | 7,93 | 2,38 | 28,5 | 102 |
| | 1.32 | .312 | .094 | 1.12 | 4.01 |
| 14S | 40,2 | 11,12 | 6,35 | 32,5 | 102 |
| | 1.58 | .438 | .25 | 1.28 | 4.01 |
| 16 | 44 | 13,48 | 8,0 | 38,9 | 115 |
| | 1.73 | .531 | 3.15 | 1.53 | 4.53 |
| 18 | 49 | 15,87 | 9,6 | 43,5 | 120 |
| | 1.93 | .625 | .378 | 1.71 | 4.72 |
| 20 | 51,5 | 19,0 | 11,3 | 46 | 121 |
| | 2.03 | .748 | .445 | 1.81 | 4.76 |
| 22 | 56 | 19,0 | 11,3 | 50,5 | 121 |
| | 2.20 | .748 | .445 | 1.99 | 4.76 |
| 24 | 60 | 23,8 | 15,5 | 54 | 126 |
| | 2.36 | .938 | .610 | 2.12 | 4.96 |
| 28 | 67 | 23,8 | 15,5 | 61 | 132 |
| | 2.64 | .938 | .610 | 2.40 | 5.20 |
| 32 | 76 | 31,75 | 23,4 | 67,6 | 140 |
| | 2.99 | 1.250 | .921 | 2.66 | 5.51 |
| 36 | 82,3 | 35,0 | 23,4 | 74,3 | 147 |
| | 3.24 | 1.378 | .921 | 2.92 | 5.79 |
| 40 | 88 | 41,25 | 29,9 | 80 | 147 |
| | 3.46 | 1.625 | 1.177 | 3.15 | 5.79 |

Dimensions are mm. over inches

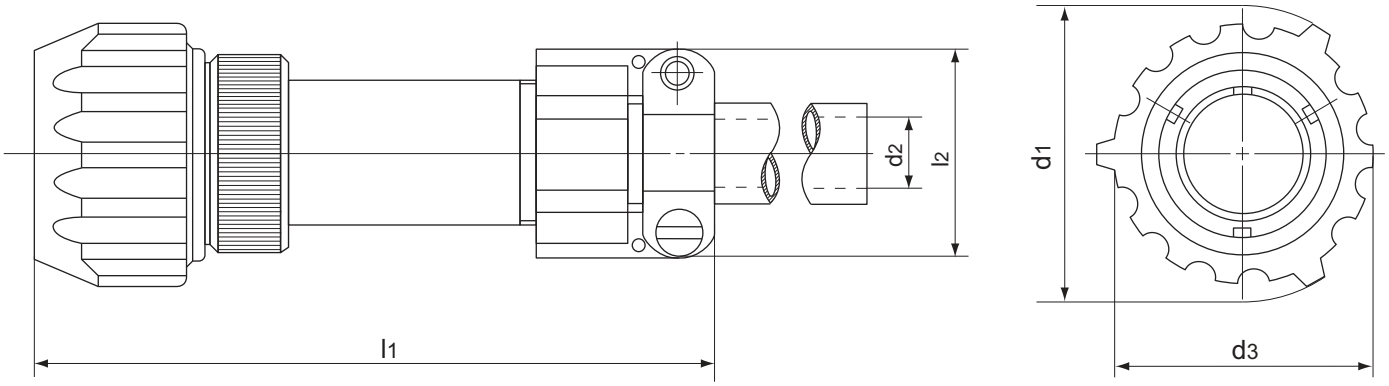
Straight plug with an individual wire sealing grommet, a long backshell, cable clamp and bushing. LAF type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ * max. | $l_1$ max. | $l_2$ max. |
|---|---|---|---|---|
| 10SL | 22,8 | 5,6 | 92 | 22,7 |
| | 0.90 | 0.22 | 3.62 | 0.89 |
| 14S | 29,2 | 7,9 | 93 | 27,5 |
| | 1.15 | 0.31 | 3.66 | 1.08 |
| 16S | 32 | 11 | 95 | 30 |
| | 1.26 | 0.43 | 3.74 | 1.18 |
| 16 | 32 | 11 | 111 | 30 |
| | 1.26 | 0.43 | 4.37 | 1.18 |
| 18 | 36,5 | 14,2 | 111 | 32,2 |
| | 1.44 | 0.56 | 4.37 | 1.27 |
| 20 | 39,9 | 15,8 | 111 | 37,5 |
| | 1.57 | 0.62 | 4.37 | 1.48 |
| 22 | 43,1 | 15,8 | 111 | 37,5 |
| | 1.70 | 0.62 | 4.37 | 1.48 |
| 24 | 46,6 | 19 | 113 | 43,3 |
| | 1.83 | 0.75 | 4.45 | 1.70 |
| 28 | 53,4 | 19 | 121 | 43,3 |
| | 2.10 | 0.75 | 4.76 | 1.70 |
| 32 | 60,1 | 23,8 | 123 | 51,7 |
| | 2.37 | 0.94 | 4.84 | 2.03 |
| 36 | 66,3 | 31,7 | 125 | 58 |
| | 2.61 | 1.25 | 4.92 | 2.28 |
| 40 | 72,5 | 34,9 | 138 | 68,5 |
| | 2.85 | 1.37 | 5.43 | 2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

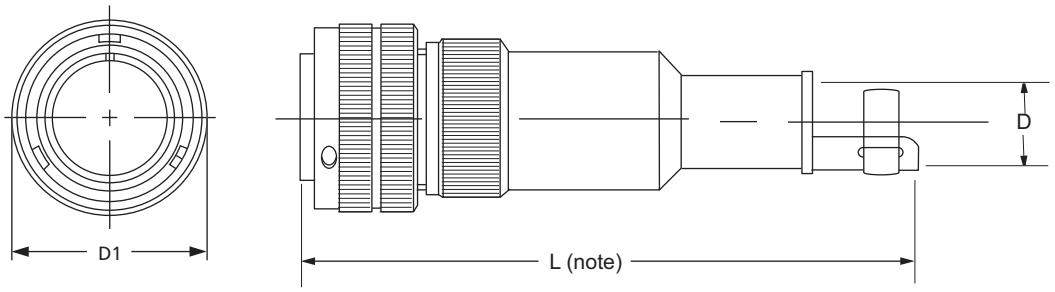
Straight plug with an individual wire sealing grommet, long backshell, cable clamp with bushing plus a rubber covered coupling nut for protection against dust and impact. LAFGG type has no grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ * max. | $d_3$ — | $l_1$ max. | $l_2$ max. |
|---|---|---|---|---|---|
| 10SL | 33,5 | 5,6 | 28,5 | 93 | 22,7 |
| | 1.32 | 0.22 | 1.12 | 3.66 | 0.89 |
| 14S | 40,2 | 7,9 | 35,2 | 94 | 27,5 |
| | 1.58 | 0.31 | 1.38 | 3.70 | 1.08 |
| 16 | 44 | 11 | 38,9 | 112 | 30 |
| | 1.73 | 0.43 | 1.53 | 4.41 | 1.18 |
| 18 | 49 | 14,2 | 43,5 | 112 | 32,2 |
| | 1.93 | 0.56 | 1.71 | 4.41 | 1.27 |
| 20 | 51,5 | 15,8 | 46 | 112 | 37,5 |
| | 2.03 | 0.62 | 1.81 | 4.41 | 1.48 |
| 22 | 56 | 15,8 | 50,5 | 112 | 37,5 |
| | 2.20 | 0.62 | 1.99 | 4.41 | 1.48 |
| 24 | 60 | 19 | 54 | 115,5 | 43,3 |
| | 2.36 | 0.75 | 2.12 | 4.55 | 1.70 |
| 28 | 67 | 19 | 61 | 123,5 | 43,3 |
| | 2.64 | 0.75 | 2.40 | 4.86 | 1.70 |
| 32 | 76 | 23,8 | 67,6 | 127 | 51,7 |
| | 2.99 | 0.94 | 2.66 | 5.00 | 2.03 |
| 36 | 82,3 | 31,7 | 74,3 | 129 | 58 |
| | 3.24 | 1.25 | 2.92 | 5.08 | 2.28 |
| 40 | 88 | 34,9 | 80 | 142 | 68,5 |
| | 3.46 | 1.37 | 3.15 | 5.59 | 2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

Plug for terminating flexible rubber hose. Similar to the BC class but with an extended rear for the mechanical strain relief of the individual wires within the conduit. Flexible rubber conduit (hose) is being secured to the backshell by a metal band or hose clamp.




Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

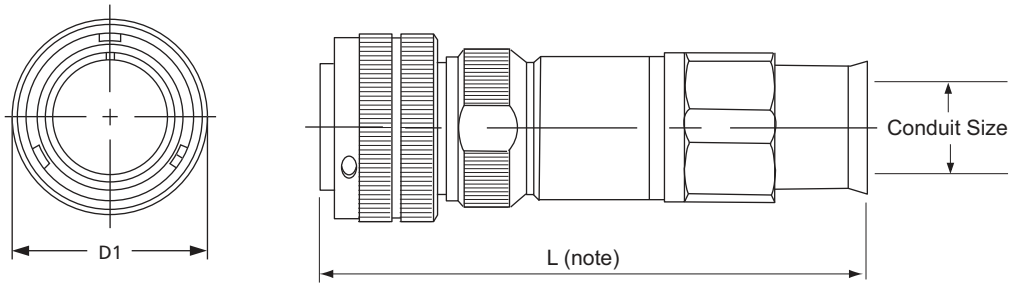
| Shell Size | Suffix in Connector Part Number | Conduit Inner Diameter | D Maximum |
|---|---|---|---|
| 18 | (045) | 11,43<br>.45 | 7,8<br>.30 |
| 22 | | 11,43<br>.45 | 7,8<br>.30 |
| 20 | (075) | 19,05<br>.75 | 13,9<br>.55 |
| 22 | | 19,05<br>.75 | 13,9<br>.55 |
| 18 | (084) | 21,34<br>.84 | 15,2<br>.60 |
| 18 | (106) | 26,92<br>1.06 | 21,4<br>.84 |
| 20 | | 26,92<br>1.06 | 21,4<br>.84 |
| 22 | | 26,92<br>1.06 | 21,4<br>.84 |
| 24 | | 26,92<br>1.06 | 21,4<br>.84 |
| 28 | | 26,92<br>1.06 | 21,4<br>.84 |
| 36 | | 26,92<br>1.06 | 21,4<br>.84 |
| 24 | (125) | 31,75<br>1.25 | 27,8<br>1.09 |

| Shell Size | Suffix in Connector Part Number | Conduit Inner Diameter | D Maximum |
|---|---|---|---|
| 18 | (141) | 35,81<br>1.41 | 28,6<br>1.12 |
| 22 | | 35,81<br>1.41 | 28,6<br>1.12 |
| 24 | | 35,81<br>1.41 | 28,6<br>1.12 |
| 40 | (150) | 38,10<br>1.50 | 32,5<br>1.28 |
| 36 | (197) | 50,04<br>1.97 | 42,0<br>1.65 |
| 40 | | 50,04<br>1.97 | 42,0<br>1.65 |
| 40 | (203) | 51,56<br>2.03 | 44,5<br>1.75 |
| 40 | (224) | 56,90<br>2.24 | 49,7<br>1.96 |

Note: Suffix in connector part number represents conduit inner diameter.

Dimensions are mm. over inches

Plug for terminating conduit. Straight, long NM backshell with adapter and backnut assembly to seal and grip on the jacket of a non-metalic flexible *CN-P type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. NMG same as NM but without a grommet or compression ring.



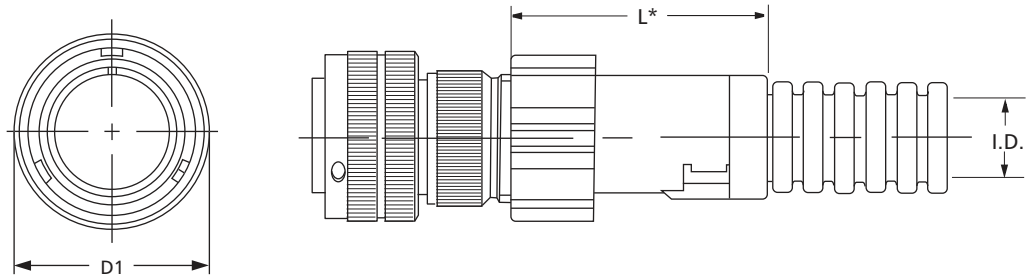

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| Conduit (CN-P Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

Dimensions are mm. over inches

Plug for terminating PMA conduit. Includes a backshell and designated PMA fitting for use with appropriate types of PMA conduit.




| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

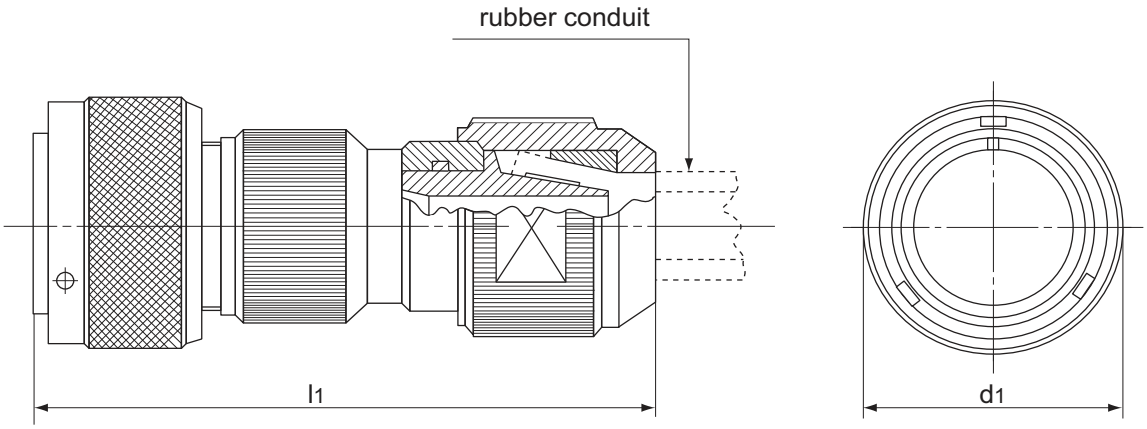
| Class | Shell Size | PMA Fitting | Part Number Suffix | PMA Conduit Inner Diameter | L Approximate |
|---|---|---|---|---|---|
| PIRAG | 10SL | BVIRA-U152 | (U152) | 11,9<br>.47 | 36,5<br>1.44 |
| | 14S | BVIRA-U182 | (U182) | 11,9<br>.47 | 36,5<br>1.44 |
| | 14S | BVIRA-U187 | (U187) | 15,2<br>.60 | 44,5<br>1.75 |
| PIRB | 20 & 22 | BVIRB-U297 | (U297) | 15,2<br>.60 | 38,0<br>1.5 |
| | 20 & 22 | BVIRB-U293 | (U293) | 22,0<br>.87 | 38,0<br>1.5 |
| PIVG | 16S &16 | BVIVG-U217 | (U217) | 15,2<br>.60 | 33,0<br>1.30 |
| | 18 | BVIVG-U247 | (U247) | 15,2<br>.60 | 35,0<br>1.38 |
| | 18 | BVIVG-U242 | (U242) | 11,9<br>.47 | 35,0<br>1.38 |
| | 20 & 22 | BVIVG-U297 | (U297) | 15,2<br>.60 | 35,0<br>1.38 |
| | 20 & 22 | BVIVG-U293 | (U293) | 22,0<br>.87 | 55,0<br>2.16 |
| | 24 & 28 | BVIVG-U353 | (U353) | 22,0<br>.87 | 52,0<br>2.05 |
| | 24 & 28 | BVIVG-U356 | (U356) | 36,5<br>1.44 | 63,0<br>2.48 |
| | 24 & 28 | BVIVG-U357 | (U357) | 15,2<br>.60 | 46,5<br>1.83 |
| | 32 | BVIVG-U436 | (U436) | 35,8<br>1.41 | 62,5<br>2.46 |
| | 32 | BVIVG-U439 | (U439) | 27,7<br>1.09 | 51,5<br>2.03 |
| | 32 | BVIVG-U433 | (U433) | 22,0<br>.87 | 52,0<br>2.05 |
| | 36 | BVIVG-U509 | (U509) | 27,7<br>1.09 | 55,0<br>2.16 |
| | 36 | BVIVG-U503 | (U503) | 22,0<br>.87 | 51,5<br>2.03 |
| | 40 | BVIVG-U563 | (U563) | 22,0<br>.87 | 51,0<br>2.00 |
| | 40 | BVIVG-U566 | (U566) | 35,8<br>1.41 | 62,0<br>2.44 |
| | 40 | BVIVG-U568 | (U568) | 46,7<br>1.84 | 64,0<br>2.52 |
| | 40 | BVIVG-U569 | (U569) | 27,7<br>1.09 | 51,0<br>2.00 |
| PILJ | 40 | BFILJ-U568G | (U568G) | 46,8<br>1.84 | 65,0<br>2.56 |

*Dimension "L" is dependent on conduit size used with each shell size. Consult our Customer Service Department.

Dimensions are mm. over inches

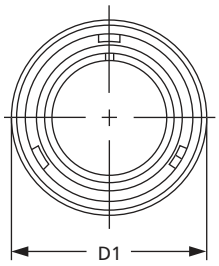
Specifications and dimensions subject to change
Dimensions shown in mm.

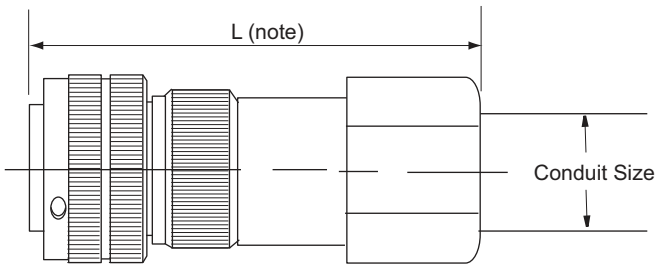
Straight plug with an individual wire sealing grommet and a special backshell for wires protection.




| Shell Size | $d_1$ max. | $l_1$ max. | Rubber conduit |
|---|---|---|---|
| 16 | 32<br>1.26 | 99<br>3.90 | 14 x 09 |
| 18 | 36,5<br>1.44 | 101<br>3.98 | 16 x 11<br>17 x 12<br>18 x 13<br>20 x 15 |
| 20 | 39,9<br>1.57 | 101<br>3.98 | 18 x 13<br>20 x 15 |
| 22 | 43,1<br>1.70 | 101<br>3.98 | 30 x 22 |
| 24 | 46,6<br>1.83 | 107<br>4.21 | 20 x 15<br>23 x 18 |
| 28 | 53,4<br>2.10 | 110<br>4.33 | 29 x 24<br>30 x 22 |
| 32 | 60,1<br>2.37 | 114<br>4.49 | 27 x 22<br>33 x 28 |
| 36 | 66,3<br>2.61 | 120<br>4.72 | 33 x 28<br>36 x 28<br>38 x 33 |
| 40 | 72,5<br>2.85 | 121<br>4.76 | 33 x 28<br>38 x 33<br>48 x 40 |

Plug for terminating conduit. Straight, long RK backshell with adapter and backnut assembly to seal and grip on the jacket of a steel core flexible *EF type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. ARK same as RK but without a grommet or compression ring.



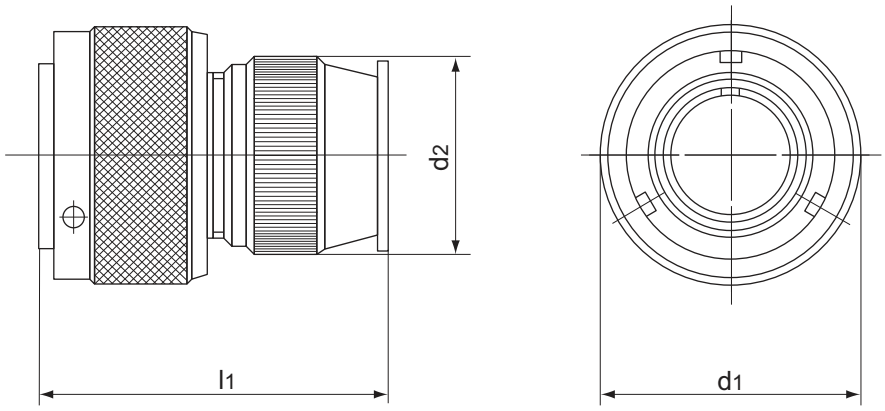

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| Conduit (EF Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Note: Dimension "L" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

Dimensions are mm. over inches

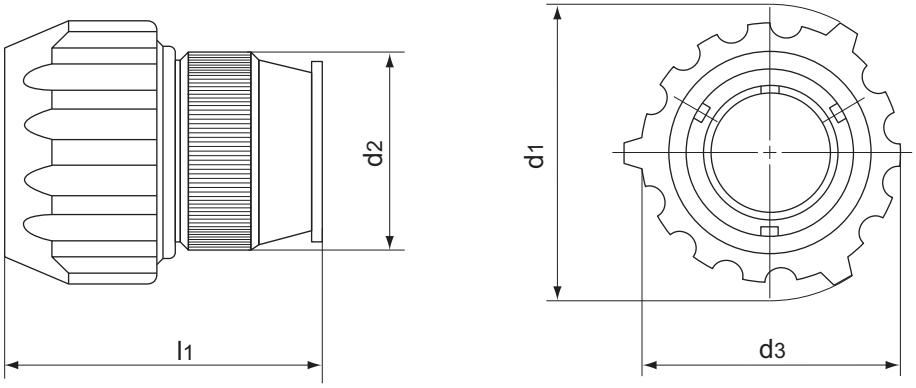
Straight plug with an individual wire sealing grommet. ARV type has no wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ max. | $l_1$ max. |
|---|---|---|---|
| 10SL | 22,8<br>0.90 | 20<br>0.79 | 40<br>1.57 |
| 14S | 29,2<br>1.15 | 24<br>0.94 | 40<br>1.57 |
| 16S | 32<br>1.26 | 26<br>1.02 | 40<br>1.57 |
| 16 | 32<br>1.26 | 26<br>1.02 | 56<br>2.20 |
| 18 | 36,5<br>1.44 | 29,5<br>1.16 | 56<br>2.20 |
| 20 | 39,9<br>1.57 | 33<br>1.30 | 57<br>2.24 |
| 22 | 43,1<br>1.70 | 36<br>1.42 | 57<br>2.24 |
| 24 | 46,6<br>1.83 | 40<br>1.57 | 59<br>2.32 |
| 28 | 53,4<br>2.10 | 46<br>1.81 | 59<br>2.32 |
| 32 | 60,1<br>2.37 | 51,5<br>2.03 | 60<br>2.36 |
| 36 | 66,3<br>2.61 | 58<br>2.28 | 60<br>2.36 |
| 40 | 72,5<br>2.85 | 64,5<br>2.54 | 61<br>2.40 |

Dimensions are mm. over inches

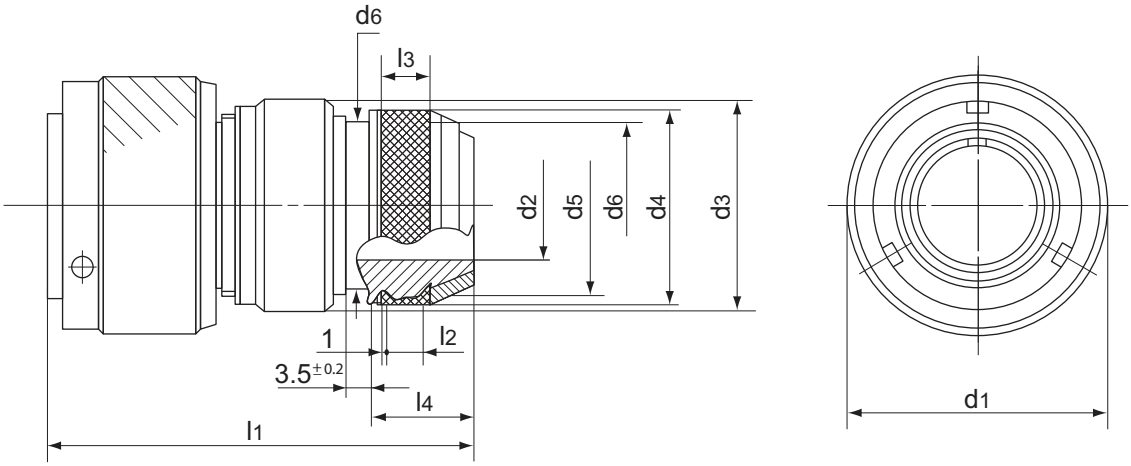
Straight plug with an individual wire sealing grommet and a rubber covered coupling nut for protection against dust and impact. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ max. | $d_3$ — | $l_1$ max. |
|---|---|---|---|---|
| 10SL | 33,5 | 20,5 | 28,5 | 40 |
| | 1.32 | 0.81 | 1.12 | 1.57 |
| 14S | 40,2 | 26 | 35,2 | 40 |
| | 1.58 | 1.02 | 1.38 | 1.57 |
| 16 | 44 | 30 | 38,9 | 56 |
| | 1.73 | 1.18 | 1.53 | 2.20 |
| 18 | 49 | 33 | 43,5 | 56 |
| | 1.93 | 1.30 | 1.71 | 2.20 |
| 20 | 51,5 | 36 | 46 | 58 |
| | 2.03 | 1.42 | 1.81 | 2.28 |
| 22 | 56 | 39 | 50,5 | 58 |
| | 2.20 | 1.53 | 1.99 | 2.28 |
| 24 | 60 | 41 | 54 | 61 |
| | 2.36 | 1.61 | 2.12 | 2.40 |
| 28 | 67 | 49 | 61 | 61 |
| | 2.64 | 1.93 | 2.40 | 2.40 |
| 32 | 76 | 55 | 67,6 | 64 |
| | 2.99 | 2.16 | 2.66 | 2.52 |
| 36 | 82,3 | 61 | 74,3 | 64 |
| | 3.24 | 2.40 | 2.92 | 2.52 |
| 40 | 88 | 68 | 80 | 65 |
| | 3.46 | 2.68 | 3.15 | 2.56 |

Dimensions are mm. over inches

Straight plug with an individual wire sealing grommet, RFI shield spring and a special backshell for shield braid and heat shrinkable tubing termination. CIR06SB - type as no RFI shield spring. (for shielding characteristics, see page 12).

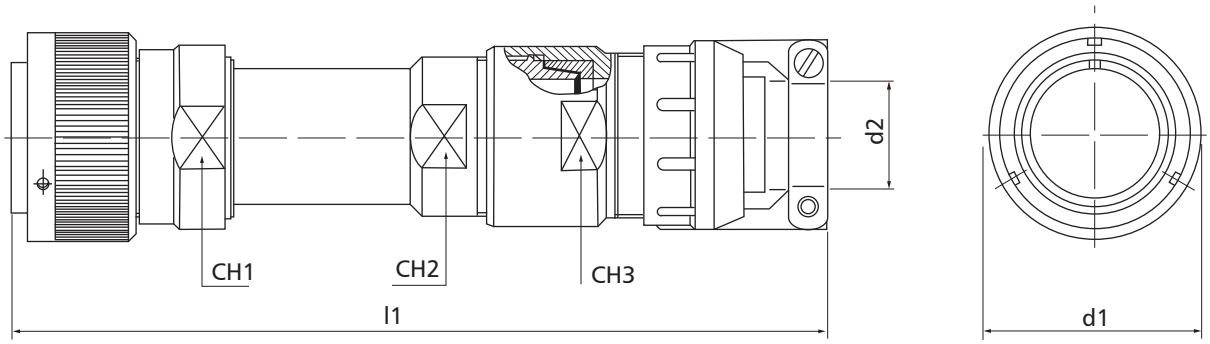



| Shell Size | $d_1$ max. | $d_2$ min. | $d_3$ max. | $d_4$ + 0,5 - 0 | $d_5$ Thread | $d_6$ max. | $l_1$ * ~ | $l_2$ min. | $l_3$ + 0,5 | $l_4$ + 0,1 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 8,6 | 22 | 18,5 | M16x1 | 16,3 | 51,4 | 4,5 | 5,5 | 17 |
| | 0.90 | 0.34 | 0.87 | 0.73 | | 0.64 | 2.02 | 0.18 | 0.22 | 0.67 |
| 14S | 29,2 | 10,6 | 25 | 22 | M20x1 | 20 | 51,4 | 5 | 7 | 17 |
| | 1.15 | 0.42 | 0.98 | 0.87 | | 0.79 | 2.02 | 0.20 | 0.27 | 0.67 |
| 16S | 32 | 13,5 | 28 | 25 | M23x1 | 23 | 53,4 | 6 | 8 | 18,5 |
| | 1.26 | 0.53 | 1.10 | 0.98 | | 0.90 | 2.10 | 0.24 | 0.31 | 0.73 |
| 16 | 32 | 13,5 | 28 | 25 | M23x1 | 23 | 62,5 | 6 | 8 | 18,5 |
| | 1.26 | 0.53 | 1.10 | 0.98 | | 0.90 | 2.46 | 0.24 | 0.31 | 0.73 |
| 18 | 36,5 | 14,6 | 31 | 28 | M26x1 | 24,5 | 63,7 | 6 | 8 | 18,5 |
| | 1.44 | 0.57 | 1.22 | 1.10 | | 0.96 | 2.50 | 0.24 | 0.31 | 0.73 |
| 20 | 39,9 | 18,5 | 35 | 32 | M30x1 | 28,5 | 63,7 | 6 | 10 | 18,5 |
| | 1.57 | 0.73 | 1.38 | 1.26 | | 1.12 | 2.50 | 0.24 | 0.39 | 0.73 |
| 22 | 43,1 | 20,8 | 38 | 34 | M32x1 | 30,5 | 63,7 | 6 | 10 | 18,5 |
| | 1.70 | 0.82 | 1.50 | 1.34 | | 1.20 | 2.50 | 0.24 | 0.39 | 0.73 |
| 24 | 46,6 | 24,6 | 41 | 38 | M36x1 | 34,5 | 64,4 | 6 | 10 | 18,5 |
| | 1.83 | 0.97 | 1.61 | 1.50 | | 1.36 | 2.53 | 0.24 | 0.39 | 0.73 |
| 28 | 53,4 | 27 | 48 | 41 | M39x1 | 37,5 | 64,4 | 6 | 10 | 18,5 |
| | 2.10 | 1.06 | 1.89 | 1.61 | | 1.48 | 2.53 | 0.24 | 0.39 | 0.73 |
| 32 | 60,1 | 33,3 | 54 | 48 | M45x1 | 44 | 66 | 6 | 10 | 18,5 |
| | 2.37 | 1.31 | 2.12 | 1.89 | | 1.73 | 2.60 | 0.24 | 0.39 | 0.73 |
| 36 | 66,3 | 38,5 | 61 | 55 | M52x1 | 51 | 66 | 6 | 10 | 18,5 |
| | 2.61 | 1.51 | 2.40 | 2.16 | | 2.0 | 2.60 | 0.24 | 0.39 | 0.73 |
| 40 | 72,5 | 46 | 68 | 62 | M59x1 | 58 | 66 | 6 | 10 | 18,5 |
| | 2.85 | 1.81 | 2.68 | 2.44 | | 2.28 | 2.60 | 0.24 | 0.39 | 0.73 |

* Nominal values after coupling backshell

Dimensions are mm. over inches

Straight plug with an individual wire sealing grommet, RFI shield spring plus a special backshell and cable clamp for shielded, jacketed cables, (for shielding characteristics, see page 12). CIR06 type has no RFI shield spring.

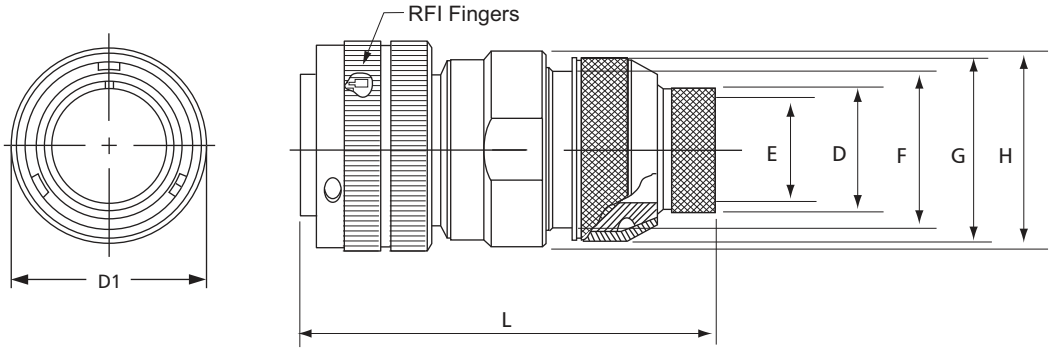



| Shell Size | $d_1$ max. | $d_2$ open | $d_2$ closed | $l_1$ * ~ | CH. 1 — | CH. 2 + 0 - 0,2 | CH. 3 + 0 - 0,2 |
|---|---|---|---|---|---|---|---|
| 18 | 36,5 | 15,87 | 9,5 | 170 | 29 | 24 | 30 |
| | 1.44 | 0.62 | 0.375 | 6.69 | 1.14 | 0.94 | 1.18 |
| 20 | 39,9 | 19 | 11,3 | 170 | 33 | 30 | 32 |
| | 1.57 | 0.75 | 0.445 | 6.69 | 1.30 | 1.18 | 1.26 |
| 22 | 43,1 | 19 | 11,3 | 170 | 36 | 30 | 32 |
| | 1.70 | 0.75 | 0.445 | 6.69 | 1.42 | 1.18 | 1.26 |
| 24 | 46,6 | 23,8 | 15,5 | 175 | 39 | 32 | 36 |
| | 1.83 | 0.938 | 0.610 | 6.89 | 1.53 | 1.26 | 1.42 |
| 28 | 53,4 | 23,8 | 15,5 | 175 | 46 | 32 | 36 |
| | 2.10 | 0.938 | 0.610 | 6.89 | 1.81 | 1.26 | 1.42 |
| 32 | 60,1 | 31,75 | 23,4 | 185 | 52 | 46 | 50 |
| | 2.37 | 1.25 | 0.921 | 7.28 | 2.05 | 1.81 | 1.97 |
| 36 | 66,3 | 35 | 24,5 | 190 | 58 | 50 | 55 |
| | 2.61 | 1.378 | 0.921 | 7.48 | 2.28 | 1.97 | 2.16 |
| 40 | 72,5 | 41,25 | 29,9 | 200 | 65 | 55 | 60 |
| | 2.85 | 1.625 | 1.177 | 7.87 | 2.56 | 2.16 | 2.36 |

* Nominal values

Dimensions are mm. over inches

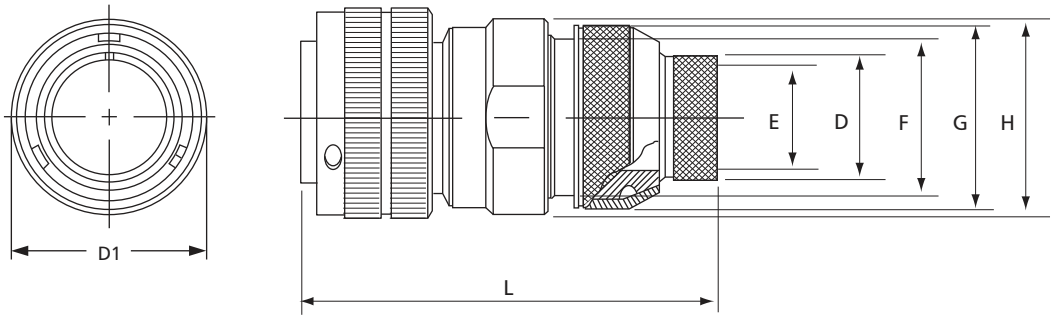
Plug with RFI grounding fingers for terminating braided shield. Straight backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not supplied). A wire sealing grommet is included. ASBT same as SBT but without a grommet.




| Shell Size | $D_1$ Maximum | D Maximum | E+/- 0,25 .010 | F | G | H +/- 0,5 .020 | L CIR06 L CIRG06 Approximate | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 11,1 | 7,9 | 16,3 | 18,5 | 22,0 | 61,8 | TR 05 |
| | 0.90 | .44 | 3.12 | .64 | .73 | .866 | 2.43 | |
| 14S | 29,2 | 14,3 | 11,1 | 20,0 | 22,0 | 24,8 | 61,8 | TR 07 |
| | 1.15 | .56 | .437 | .79 | .87 | .976 | 2.43 | |
| 16S | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 63,8 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 2.51 | |
| 16 | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 73,3 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 2.89 | |
| 18 | 36,5 | 19,1 | 15,9 | 24,5 | 28.0 | 30,8 | 74,5 | TR 10 |
| | 1.44 | .75 | .625 | .97 | 1.10 | 1.213 | 2.93 | |
| 20 | 39,9 | 22,3 | 19,1 | 28.5 | 32,0 | 34,8 | 75,7 | TR 12 |
| | 1.57 | .88 | .750 | 1.12 | 1.26 | 1.370 | 2.98 | |
| 22 | 43,1 | 25,4 | 22,2 | 30,5 | 34,0 | 37,8 | 75,0 | TR 14 |
| | 1.70 | 1.00 | .875 | 1.20 | 1.34 | 1.488 | 2.95 | |
| 24 | 46,6 | 28,7 | 25,4 | 34,5 | 38,0 | 40,8 | 75,0 | TR 16 |
| | 1.84 | 1.13 | 1.00 | 1.36 | 1.50 | 1.606 | 2.95 | |
| 28 | 53,4 | 31,8 | 28,6 | 37,5 | 41,0 | 47,8 | 76,1 | TR 18 |
| | 2.10 | 1.25 | 1.125 | 1.48 | 1.61 | 1.881 | 3.00 | |
| 32 | 60,1 | 31,8 | 28,6 | 44,0 | 48,0 | 53,8 | 77,7 | TR 18 |
| | 2.37 | 1.25 | 1.125 | 1.73 | 1.89 | 2.118 | 3.06 | |
| 36 | 66,3 | 44,5 | 41,3 | 51,0 | 55,0 | 60,8 | 76,5 | Not |
| | 2.61 | 1.75 | 1.625 | 2.01 | 2.17 | 2.394 | 3.01 | Available |
| 40 | 72,4 | 50.8 | 47,6 | 58,0 | 62,0 | 67,8 | 76,5 | Not |
| | 2.85 | 2.00 | 1.875 | 2.28 | 2.44 | 2.669 | 3.01 | Available |

Dimensions are mm. over inches

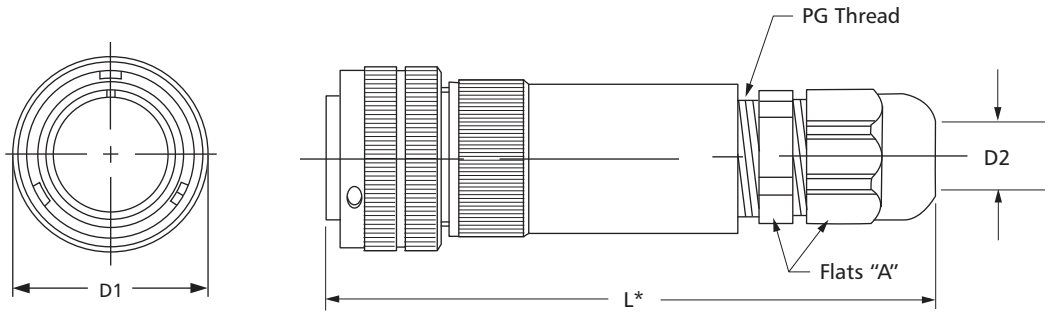
Plug for terminating braided shield. Straight backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not supplied). A wire sealing grommet is included. ASBT same as SBT but without a grommet.




| Shell Size | $D_1$ Maximum | D Maximum | E+/- 0,25 .010 | F | G | H +/- 0,5 .020 | L CIR06 L CIRG06 Approximate | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 11,1 | 7,9 | 16,3 | 18,5 | 22,0 | 61,8 | TR 05 |
| | 0.90 | .44 | 3.12 | .64 | .73 | .866 | 2.43 | |
| 14S | 29,2 | 14,3 | 11,1 | 20,0 | 22,0 | 24,8 | 61,8 | TR 07 |
| | 1.15 | .56 | .437 | .79 | .87 | .976 | 2.43 | |
| 16S | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 63,8 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 2.51 | |
| 16 | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 73,3 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 2.89 | |
| 18 | 36,5 | 19,1 | 15,9 | 24,5 | 28.0 | 30,8 | 74,5 | TR 10 |
| | 1.44 | .75 | .625 | .97 | 1.10 | 1.213 | 2.93 | |
| 20 | 39,9 | 22,3 | 19,1 | 28.5 | 32,0 | 34,8 | 75,7 | TR 12 |
| | 1.57 | .88 | .750 | 1.12 | 1.26 | 1.370 | 2.98 | |
| 22 | 43,1 | 25,4 | 22,2 | 30,5 | 34,0 | 37,8 | 75,0 | TR 14 |
| | 1.70 | 1.00 | .875 | 1.20 | 1.34 | 1.488 | 2.95 | |
| 24 | 46,6 | 28,7 | 25,4 | 34,5 | 38,0 | 40,8 | 75,0 | TR 16 |
| | 1.84 | 1.13 | 1.00 | 1.36 | 1.50 | 1.606 | 2.95 | |
| 28 | 53,4 | 31,8 | 28,6 | 37,5 | 41,0 | 47,8 | 76,1 | TR 18 |
| | 2.10 | 1.25 | 1.125 | 1.48 | 1.61 | 1.881 | 3.00 | |
| 32 | 60,1 | 31,8 | 28,6 | 44,0 | 48,0 | 53,8 | 77,7 | TR 18 |
| | 2.37 | 1.25 | 1.125 | 1.73 | 1.89 | 2.118 | 3.06 | |
| 36 | 66,3 | 44,5 | 41,3 | 51,0 | 55,0 | 60,8 | 76,5 | Not |
| | 2.61 | 1.75 | 1.625 | 2.01 | 2.17 | 2.394 | 3.01 | Available |
| 40 | 72,4 | 50.8 | 47,6 | 58,0 | 62,0 | 67,8 | 76,5 | Not |
| | 2.85 | 2.00 | 1.875 | 2.28 | 2.44 | 2.669 | 3.01 | Available |

Dimensions are mm. over inches

Plug for terminating jacketed cable. Long metal backshell and non-metallic fitting with PG thread. SL1 same as SL but includes a wire sealing grommet and compression ring.



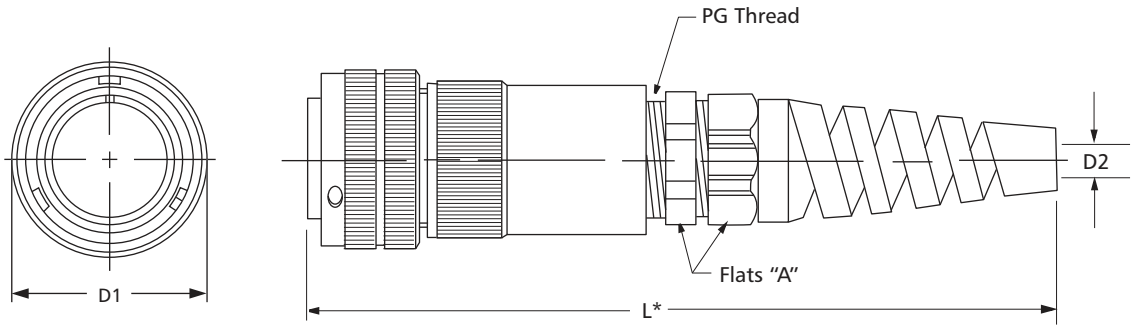

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00<br>.118 | 6,48<br>.255 | (07R) | 2,00<br>.079 | 5,00<br>.197 | PG-7 | 15,01<br>.591 |
| (09) | 3,99<br>.157 | 7,98<br>.314 | (09R) | 2,00<br>.079 | 5,99<br>.236 | PG-9 | 19,05<br>.750 |
| (11) | 5,00<br>.197 | 10,0<br>.394 | (11R) | 3,00<br>.118 | 7,09<br>.279 | PG-11 | 22,00<br>.866 |
| (13) | 5,99<br>.236 | 11,99<br>.472 | (13R) | 8,66<br>.341 | 8,97<br>.353 | PG-13 | 24,13<br>.950 |
| (16) | 10,0<br>.394 | 13,99<br>.551 | (16R) | 10,74<br>.423 | 12,22<br>.481 | PG-16 | 27,00<br>1.063 |
| (21) | 13,84<br>.545 | 18,00<br>.709 | (21R) | 12,22<br>.481 | 15,67<br>.617 | PG-21 | 32,99<br>1.299 |
| (29) | 17,98<br>.708 | 24,99<br>.984 | (29R) | 13,00<br>.512 | 19,99<br>.787 | PG-29 | 42,01<br>1.654 |
| (36) | 22,0<br>.866 | 31,98<br>1.259 | (36R) | 19,99<br>.787 | 25,99<br>1,023 | PG-36 | 53,00<br>2.087 |
| (42) | 31,98<br>1.259 | 38,00<br>1.496 | (42R) | 24,00<br>.945 | 30,99<br>1.220 | PG-42 | 59.99<br>2.362 |
| (48) | 36,98<br>1.456 | 43,99<br>1.732 | (48R) | 28,98<br>1.141 | 35,00<br>1.378 | PG-48 | 64,99<br>2.559 |

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.

Dimensions are mm. over inches

Plug for terminating jacketed cable. Long metal backshell and non-metallic spiral fitting with PG thread (to prevent sharp angle bending). SLX1 same as SLX but includes a wire sealing grommet and compression ring.



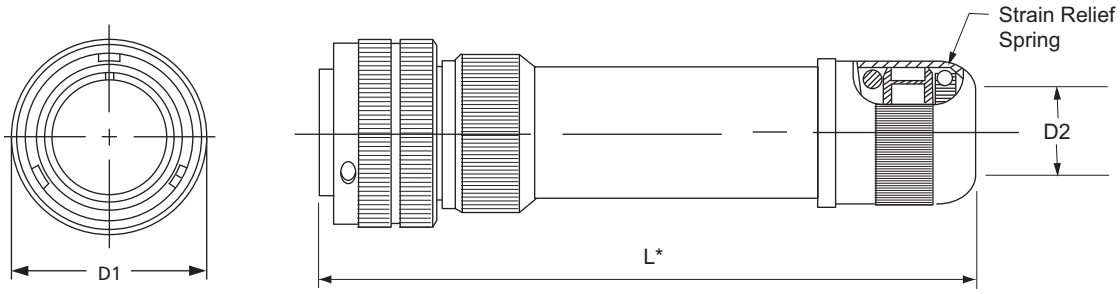

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00<br>.118 | 6,48<br>.255 | (07R) | 2,00<br>.079 | 5,00<br>.197 | PG-7 | 15,01<br>.591 |
| (09) | 3,99<br>.157 | 7,98<br>.314 | (09R) | 2,00<br>.079 | 5,99<br>.236 | PG-9 | 19,05<br>.750 |
| (11) | 5,00<br>.197 | 10,0<br>.394 | (11R) | 3,00<br>.118 | 7,09<br>.279 | PG-11 | 22,00<br>.866 |
| (13) | 5,99<br>.236 | 11,99<br>.472 | (13R) | 8,66<br>.341 | 8,97<br>.353 | PG-13 | 24,13<br>.950 |
| (16) | 10,0<br>.394 | 13,99<br>.551 | (16R) | 10,74<br>.423 | 12,22<br>.481 | PG-16 | 27,00<br>1.063 |
| (21) | 13,84<br>.545 | 18,00<br>.709 | (21R) | 12,22<br>.481 | 15,67<br>.617 | PG-21 | 32,99<br>1.299 |

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.

Dimensions are mm. over inches

Plug for terminating jacketed cable. Long WK backshell and backnut assembly suitable to seal and grip on the jacket of the cable. WKG same as WK but includes a wire sealing grommet and compression ring.



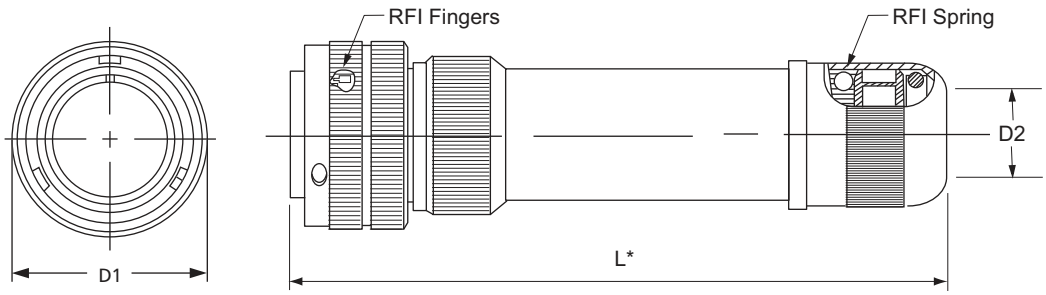

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. |
|---|---|---|---|---|---|
| 02 | 3,18<br>.125 | 6,35<br>.250 | 08 | 19,86<br>.782 | 25,4<br>1.000 |
| 03 | 3,99<br>.157 | 9,53<br>.375 | 09 | 23,04<br>.907 | 28,58<br>1.125 |
| 04 | 7,16<br>.282 | 12,7<br>.500 | 10 | 26,21<br>1.032 | 31,75<br>1.250 |
| 05 | 10,34<br>.407 | 15,8<br>.625 | 11 | 29,39<br>1.157 | 34,93<br>1.375 |
| 06 | 13,51<br>.532 | 19,05<br>.750 | 12 | 32,56<br>1.282 | 38,1<br>1.500 |
| 07 | 16,69<br>.657 | 22,23<br>.875 | 17 | 50,80<br>2.000 | 53,99<br>2.125 |

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

Dimensions are mm. over inches

Plug for terminating braided shield. Long WK backshell, grommet and backnut assembly suitable for shield termination and strain relief of the jacket of the cable.



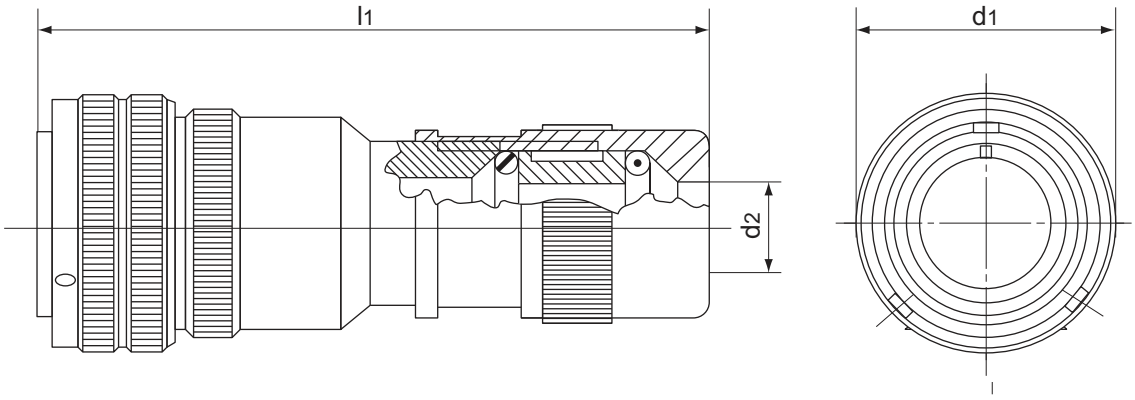

| Shell Size | $D_1$ Maximum | L Approximate |
|---|---|---|
| 10SL | 22,8 | 111 |
| | 0.90 | 4.37 |
| 14S | 29,2 | 112 |
| | 1.15 | 4.41 |
| 16S | 33,0 | 100 |
| | 1.30 | 3.94 |
| 16 | 33,0 | 110 |
| | 1.30 | 4.33 |
| 18 | 36,5 | 127 |
| | 1.44 | 5.00 |
| 20 | 39,9 | 127 |
| | 1.57 | 5.00 |
| 22 | 43,1 | 133 |
| | 1.70 | 5.24 |
| 24 | 46,6 | 134 |
| | 1.84 | 5.28 |
| 28 | 53,4 | 134 |
| | 2.10 | 5.28 |
| 32 | 60,1 | 136 |
| | 2.37 | 5.35 |
| 36 | 66,3 | 136 |
| | 2.61 | 5.35 |
| 40 | 72,4 | 136 |
| | 2.85 | 5.35 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. |
|---|---|---|---|---|---|
| 02 | 3,18 | 6,35 | 08 | 19,86 | 25,4 |
| | .125 | .250 | | .782 | 1.000 |
| 03 | 3,99 | 9,53 | 09 | 23,04 | 28,58 |
| | .157 | .375 | | .907 | 1.125 |
| 04 | 7,16 | 12,7 | 10 | 26,21 | 31,75 |
| | .282 | .500 | | 1.032 | 1.250 |
| 05 | 10,34 | 15,8 | 11 | 29,39 | 34,93 |
| | .407 | .625 | | 1.157 | 1.375 |
| 06 | 13,51 | 19,05 | 12 | 32,56 | 38,1 |
| | .532 | .750 | | 1.282 | 1.500 |
| 07 | 16,69 | 22,23 | 17 | 50,80 | 53,99 |
| | .657 | .875 | | 2.000 | 2.125 |

*Dimension "L" will vary from the values indicated with escalating or de-escalating backshells and some special insert configurations. Verify with our Customer Service Department.

Dimensions are mm. over inches

Straight plug with backshell and backnut assembly with strain relief and seal for jacketed cable. Individual wire sealing grommet not included.

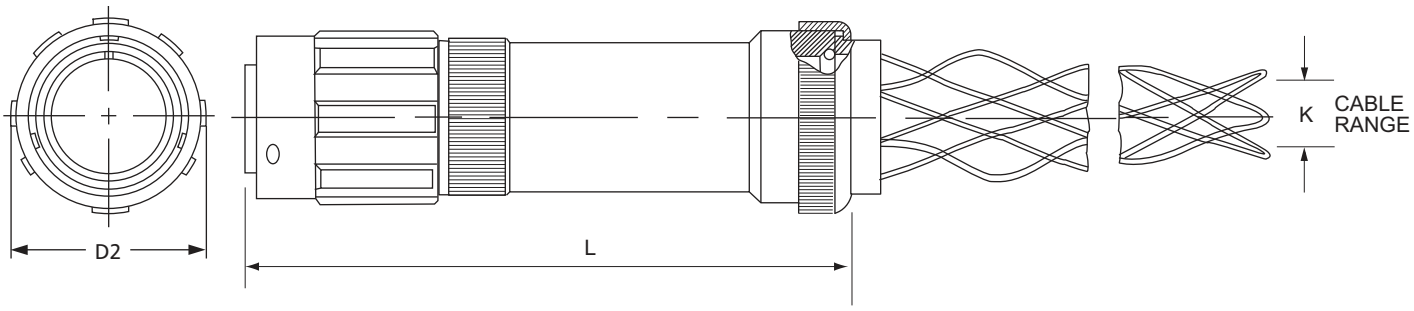



| Shell Size | $d_1$ max. | $l_1$ ≃ |
|---|---|---|
| 10SL | 22,8 | 111 |
| | 0.90 | 4.37 |
| 14S | 29,2 | 112 |
| | 1.15 | 4.41 |
| 16S | 32 | 100 |
| | 1.26 | 3.94 |
| 16 | 32 | 110 |
| | 1.26 | 4.33 |
| 18 | 36,5 | 127 |
| | 1.44 | 5.00 |
| 20 | 39,9 | 127 |
| | 1.57 | 5.00 |
| 22 | 43,1 | 133 |
| | 1.70 | 5.24 |
| 24 | 46,6 | 134 |
| | 1.83 | 5.27 |
| 28 | 53,4 | 134 |
| | 2.10 | 5.27 |
| 32 | 60,1 | 136 |
| | 3.37 | 5.35 |
| 36 | 66,3 | 136 |
| | 2.61 | 5.35 |
| 40 | 72,5 | 136 |
| | 2.85 | 5.35 |

| Termination type (YY) | $d_2$ min. | $d_2$ max. |
|---|---|---|
| 02 | 3,18 | 6.35 |
| | 0.125 | 0.25 |
| 03 | 3,99 | 9,53 |
| | 0.157 | 0.375 |
| 04 | 7,16 | 12,7 |
| | 0.282 | 0.50 |
| 05 | 10,34 | 15,88 |
| | 0.407 | 0.625 |
| 06 | 13,51 | 19,05 |
| | 0.532 | 0.75 |
| 07 | 16,69 | 22,23 |
| | 0.657 | 0.875 |
| 08 | 19,86 | 25,4 |
| | 0.782 | 1.00 |
| 09 | 23,04 | 28,58 |
| | 0.907 | 1.125 |
| 10 | 26,21 | 31,75 |
| | 1.032 | 1.25 |
| 11 | 29,39 | 34,93 |
| | 1.157 | 1.375 |
| 12 | 32,56 | 38,1 |
| | 1.282 | 1.50 |
| 17 | 50,80 | 53,99 |
| | 2.000 | 2.125 |

*Dimension "L" is dependent on the backshell and backnut assembly combination. Dimension shown is only typical. Consult factory for actual dimensions.

Plug for terminating jacketed cable. Extended heavy duty coupling nut and long LC backshell with internal adapter suitable for various sizes of cable, grommet, compression ring and a cord grip included. LCG same as LC but without the wire sealing grommet and compression ring.

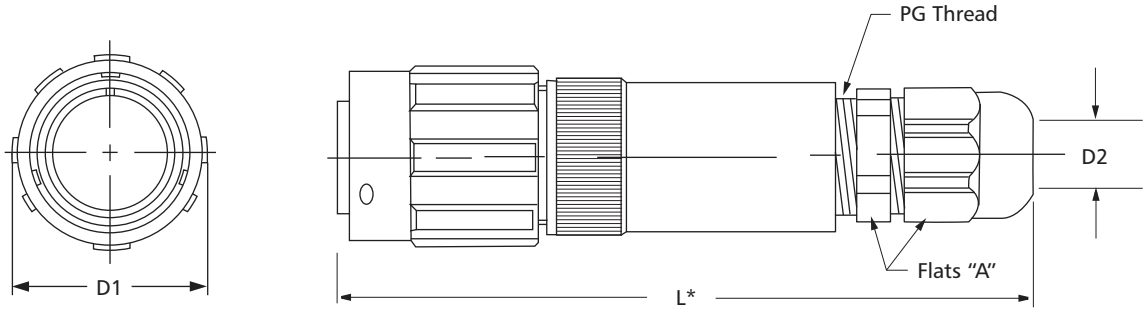



| Shell Size | $D_2$ Maximum | L Approximate |
|---|---|---|
| 10SL | 25,3 | 100 |
| | 0.97 | 3.94 |
| 14S | 31,7 | 100 |
| | 1.25 | 3.94 |
| 16S | 35,9 | 100 |
| | 1.41 | 3.94 |
| 16 | 35,9 | 110 |
| | 1.41 | 4.33 |
| 18 | 39,5 | 110 |
| | 1.56 | 4.33 |
| 20 | 42,9 | 116 |
| | 1.69 | 4.57 |
| 22 | 46,1 | 116 |
| | 1.82 | 4.57 |
| 24 | 49,5 | 120 |
| | 1.95 | 4.72 |
| 28 | 56,9 | 129 |
| | 2.24 | 5.08 |
| 32 | 63,7 | 145 |
| | 2.51 | 5.71 |
| 36 | 70,1 | 145 |
| | 2.76 | 5.71 |
| 40 | 75,7 | 145 |
| | 2.98 | 5.71 |

| K Suffix in Connector Part Number | K Cable Range Min. | Max. |
|---|---|---|
| K0 | 6,35 | 9,53 |
| | .250 | .375 |
| K1 | 9,53 | 12,7 |
| | .375 | .500 |
| K2 | 12,7 | 15,87 |
| | .500 | .625 |
| K3 | 15,87 | 19,05 |
| | .625 | .750 |
| K4 | 19,05 | 22,23 |
| | .750 | .875 |
| K5 | 22,23 | 25,4 |
| | .875 | 1.000 |
| K6 | 25,4 | 28,45 |
| | 1.000 | 1.120 |
| K7 | 28,45 | 31,75 |
| | 1.120 | 1.250 |
| K8 | 32,77 | 38,1 |
| | 1.290 | 1.500 |
| K9 | 39.62 | 41,28 |
| | 1.560 | 1.625 |
| K10 | 41.28 | 44,45 |
| | 1.625 | 1.750 |

Dimensions are mm. over inches

Plug for terminating jacketed cable. Extended heavy duty coupling nut, long metal backshell and non-metallic fitting with PG thread. SL1 same as SL but includes a wire sealing grommet and compression ring.

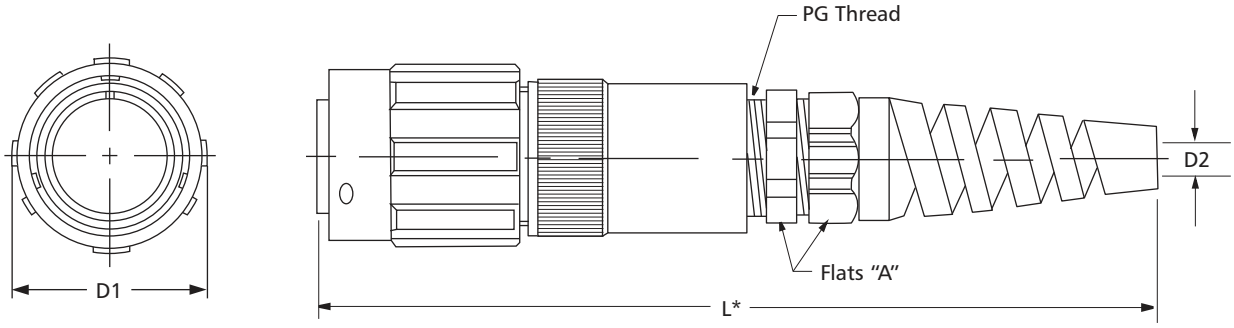



| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 25,3<br>0.97 |
| 14S | 31,7<br>1.25 |
| 16S | 35,9<br>1.41 |
| 16 | 35,9<br>1.41 |
| 18 | 39,5<br>1.56 |
| 20 | 42,9<br>1.69 |
| 22 | 46,1<br>1.82 |
| 24 | 49,5<br>1.95 |
| 28 | 56,9<br>2.24 |
| 32 | 63,7<br>2.51 |
| 36 | 70,1<br>2.76 |
| 40 | 75,7<br>2.98 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00<br>.118 | 6,48<br>.255 | (07R) | 2,00<br>.079 | 5,00<br>.197 | PG-7 | 15,01<br>.591 |
| (09) | 3,99<br>.157 | 7,98<br>.314 | (09R) | 2,00<br>.079 | 5,99<br>.236 | PG-9 | 19,05<br>.750 |
| (11) | 5,00<br>.197 | 10,0<br>.394 | (11R) | 3,00<br>.118 | 7,09<br>.279 | PG-11 | 22,00<br>.866 |
| (13) | 5,99<br>.236 | 11,99<br>.472 | (13R) | 8,66<br>.341 | 8,97<br>.353 | PG-13 | 24,13<br>.950 |
| (16) | 10,0<br>.394 | 13,99<br>.551 | (16R) | 10,74<br>.423 | 12,22<br>.481 | PG-16 | 27,00<br>1.063 |
| (21) | 13,84<br>.545 | 18,00<br>.709 | (21R) | 12,22<br>.481 | 15,67<br>.617 | PG-21 | 32,99<br>1.299 |
| (29) | 17,98<br>.708 | 24,99<br>.984 | (29R) | 13,00<br>.512 | 19,99<br>.787 | PG-29 | 42,01<br>1.654 |
| (36) | 22,0<br>.866 | 31,98<br>1.259 | (36R) | 19,99<br>.787 | 25,99<br>1,023 | PG-36 | 53,00<br>2.087 |
| (42) | 31,98<br>1.259 | 38,00<br>1.496 | (42R) | 24,00<br>.945 | 30,99<br>1.220 | PG-42 | 59.99<br>2.362 |
| (48) | 36,98<br>1.456 | 43,99<br>1.732 | (48R) | 28,98<br>1.141 | 35,00<br>1.378 | PG-48 | 64,99<br>2.559 |

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.
Dimensions are mm. over inches

Plug for terminating jacketed cable. Extended heavy duty coupling nut, long metal backshell and non-metallic spiral fitting with PG thread (to prevent sharp angle bending). SLX1 same as SLX but includes a wire sealing grommet and compression ring.



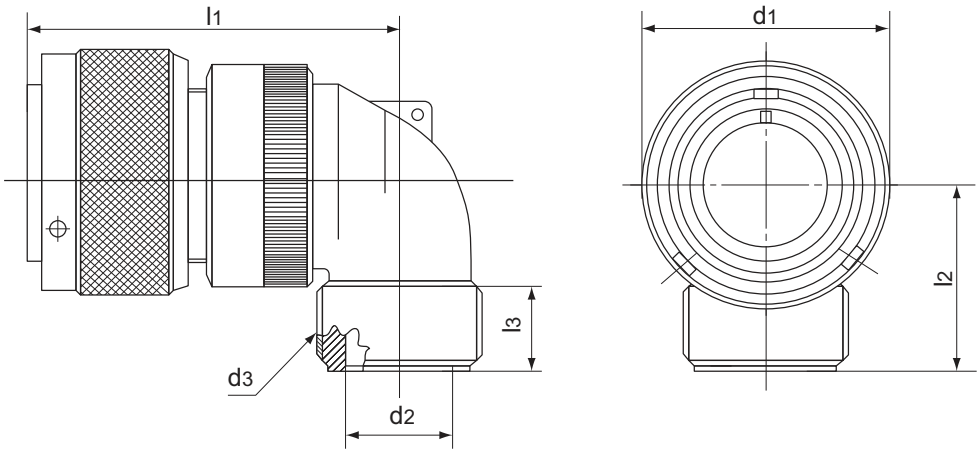

| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 25,3<br>0.97 |
| 14S | 31,7<br>1.25 |
| 16S | 35,9<br>1.41 |
| 16 | 35,9<br>1.41 |
| 18 | 39,5<br>1.56 |
| 20 | 42,9<br>1.69 |
| 22 | 46,1<br>1.82 |
| 24 | 49,5<br>1.95 |
| 28 | 56,9<br>2.24 |
| 32 | 63,7<br>2.51 |
| 36 | 70,1<br>2.76 |
| 40 | 75,7<br>2.98 |

| D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | D2 Suffix in Connector Part No. | D2 Cable Range Min. | D2 Cable Range Max. | Thread Size | A Wrench Flats |
|---|---|---|---|---|---|---|---|
| (07) | 3,00<br>.118 | 6,48<br>.255 | (07R) | 2,00<br>.079 | 5,00<br>.197 | PG-7 | 15,01<br>.591 |
| (09) | 3,99<br>.157 | 7,98<br>.314 | (09R) | 2,00<br>.079 | 5,99<br>.236 | PG-9 | 19,05<br>.750 |
| (11) | 5,00<br>.197 | 10,0<br>.394 | (11R) | 3,00<br>.118 | 7,09<br>.279 | PG-11 | 22,00<br>.866 |
| (13) | 5,99<br>.236 | 11,99<br>.472 | (13R) | 8,66<br>.341 | 8,97<br>.353 | PG-13 | 24,13<br>.950 |
| (16) | 10,0<br>.394 | 13,99<br>.551 | (16R) | 10,74<br>.423 | 12,22<br>.481 | PG-16 | 27,00<br>1.063 |
| (21) | 13,84<br>.545 | 18,00<br>.709 | (21R) | 12,22<br>.481 | 15,67<br>.617 | PG-21 | 32,99<br>1.299 |

*Dimension "L" is dependent on the backshell, the cable range and the fitting used. Verify with our Customer Service Department.

Dimensions are mm. over inches

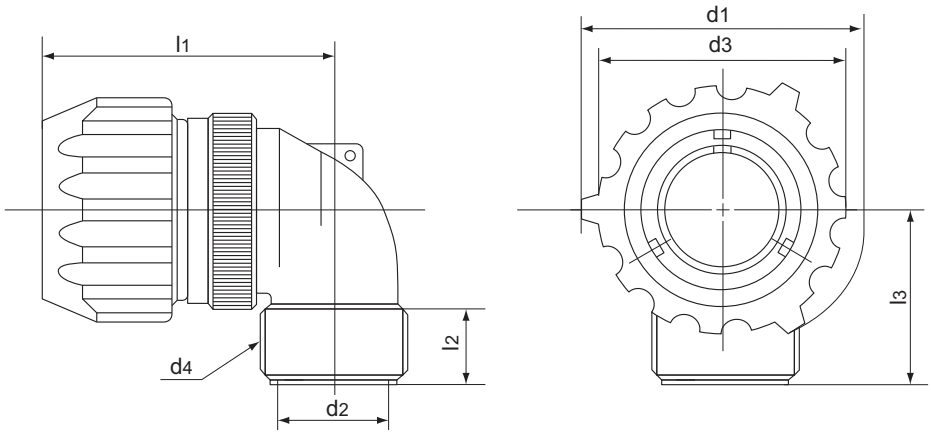
Right angle (90° elbow) plug. R type has an individual wire sealing grommet. CIRG type also has a RFI shield spring (for shielding characteristics, see page 12).




| Shell Size | $d_1$ max. | $d_2$ +0,2 -0,1 | $d_3$ Thread in inches | $l_1$ max. | $l_2$ max. | $l_3$ min. |
|---|---|---|---|---|---|---|
| 10SL | 22,8 | 10,5 | 5/8 -24 UNEF-2A | 45 | 30 | 9,4 |
| | 0.90 | 0.41 | | 1.77 | 1.18 | 0.37 |
| 14S | 29,2 | 11,5 | 3/4 -20 UNEF-2A | 47 | 30 | 9,4 |
| | 1.15 | 0.45 | | 1.85 | 1.18 | 0.37 |
| 16S | 32 | 14,7 | 7/8 -20 UNEF-2A | 48 | 30 | 9,4 |
| | 1.26 | 0.59 | | 1.89 | 1.18 | 0.37 |
| 16 | 32 | 14,7 | 7/8 -20 UNEF-2A | 57 | 30 | 9,4 |
| | 1.26 | 0.59 | | 2.24 | 1.18 | 0.37 |
| 18 | 36,5 | 17,2 | 1" -20 UNEF-2A | 58 | 35 | 9,4 |
| | 1.44 | 0.68 | | 2.28 | 1.38 | 0.37 |
| 20 | 39,9 | 20,35 | 1"3/16 -18 UNEF-2A | 61 | 35 | 9,4 |
| | 1.57 | 0.80 | | 2.40 | 1.38 | 0.37 |
| 22 | 43,1 | 23 | 1"3/16 -18 UNEF-2A | 61 | 35 | 9,4 |
| | 1.70 | 0.90 | | 2.40 | 1.38 | 0.37 |
| 24 | 46,6 | 25,8 | 1"7/16 -18 UNEF-2A | 66 | 40 | 9,4 |
| | 1.83 | 1.01 | | 2.60 | 1.57 | 0.37 |
| 28 | 53,4 | 28,7 | 1"7/16 -18 UNEF-2A | 66 | 40 | 9,4 |
| | 2.10 | 1.13 | | 2.60 | 1.57 | 0.37 |
| 32 | 60,1 | 36,5 | 1"3/4 -18 UNS-2A | 72 | 45 | 11 |
| | 2.37 | 1.44 | | 2.83 | 1.77 | 0.43 |
| 36 | 66,3 | 42,6 | 2" -18 UNS-2A | 75 | 50 | 12,6 |
| | 2.61 | 1.68 | | 2.95 | 1.97 | 0.50 |
| 40 | 72,5 | 48,6 | 2"1/4 -16 UN-2A | 78 | 55 | 12,6 |
| | 2.85 | 1.91 | | 3.07 | 2.16 | 0.50 |

Dimensions are mm. over inches

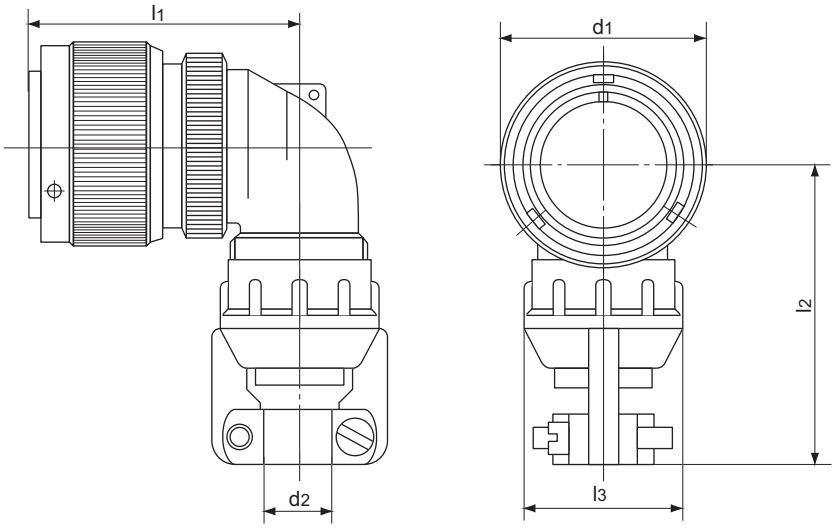
Right angle (90º elbow) plug, with a rubber covered coupling nut for protection against dust and impact.RGG type has an individual wire sealing grommet. To be mated only with receptacles with countersunk mounting holes. See pages 174.




| Shell Size | $d_1$ — | $d_2$ +0,2 -0,1 | $d_3$ — | $d_4$ Thread in inches | $l_1$ max. | $l_2$ min. | $l_3$ max. |
|---|---|---|---|---|---|---|---|
| 10SL | 33,5 | 10,5 | 28,5 | 5/8 -24 UNEF-2A | 49 | 9,4 | 30 |
| | 1.32 | 0.41 | 1.12 | | 1.93 | 0.37 | 1.18 |
| 14S | 40,2 | 11,5 | 35,2 | 3/4 -20 UNEF-2A | 53 | 9,4 | 30 |
| | 1.58 | 0.45 | 1.38 | | 2.09 | 0.37 | 1.18 |
| 16 | 44 | 14,7 | 38,9 | 7/8 -20 UNEF-2A | 63 | 9,4 | 30 |
| | 1.73 | 0.58 | 1.72 | | 2.48 | 0.37 | 1.18 |
| 18 | 49 | 17,2 | 43,5 | 1” -20 UNEF-2A | 64 | 9,4 | 35 |
| | 1.93 | 0.68 | 1.71 | | 2.52 | 0.37 | 1.38 |
| 20 | 51,5 | 20,35 | 46 | 1”3/16 -18 UNEF-2A | 67 | 9,4 | 35 |
| | 2.03 | 0.80 | 1.81 | | 2.64 | 0.37 | 1.38 |
| 22 | 56 | 23 | 50,5 | 1”3/16 -18 UNEF-2A | 67 | 9,4 | 35 |
| | 2.20 | 0.90 | 1.99 | | 2.64 | 0.37 | 1.38 |
| 24 | 60 | 25,8 | 54 | 1”7/16 -18 UNEF-2A | 73 | 9,4 | 40 |
| | 2.36 | 1.01 | 2.12 | | 2.87 | 0.37 | 1.57 |
| 28 | 67 | 28,7 | 61 | 1”7/16 -18 UNEF-2A | 73 | 9,4 | 40 |
| | 2.64 | 1.13 | 2.40 | | 2.87 | 0.37 | 1.57 |
| 32 | 76 | 36,5 | 67,6 | 1”3/4 -18 UNS-2A | 78 | 11 | 45 |
| | 2.99 | 1.44 | 2.66 | | 3.07 | 0.43 | 1.77 |
| 36 | 82,3 | 42,6 | 74,3 | 2” -18 UNS-2A | 81 | 12,6 | 50 |
| | 3.24 | 1.68 | 2.92 | | 3.19 | 0.50 | 1.97 |
| 40 | 88 | 48,6 | 80 | 2”1/4 -16 UN-2A | 84 | 12,6 | 55 |
| | 3.46 | 1.91 | 3.15 | | 3.31 | 0.50 | 2.16 |

Dimensions are mm. over inches

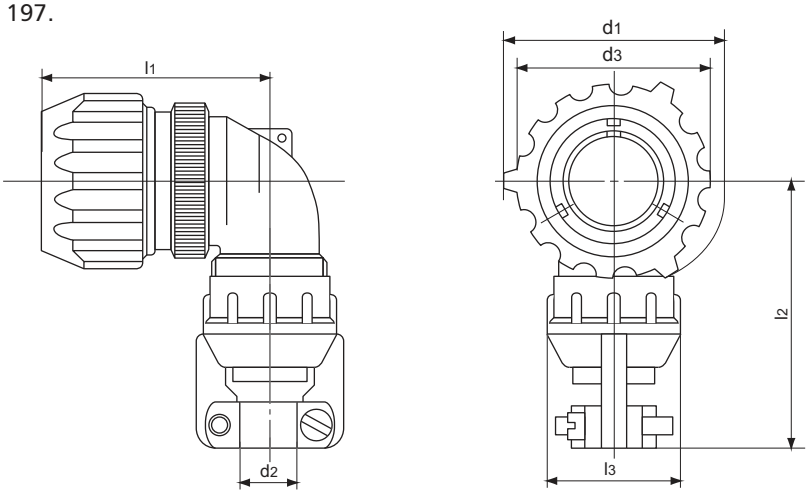
Right angle (90° elbow) plug with a cable clamp for jacketed cables. CFZ type also has an individual wire sealing grommet.




| Shell Size | $d_1$ max. | $d_2$ Open | $d_2$ Closed | $l_1$ max. | $l_2$ max. | $l_3$ ± 0,2 |
|---|---|---|---|---|---|---|
| 10SL | 22,8 | 7,93 | 2,38 | 45 | 61 | 22,6 |
| | 0.90 | .312 | .094 | 1.77 | 2.40 | 0.89 |
| 14S | 29,2 | 11,12 | 6,35 | 47 | 61 | 25,8 |
| | 1.15 | .438 | .25 | 1.85 | 2.40 | 1.01 |
| 16S | 32 | 13,48 | 8,0 | 48 | 61 | 28,1 |
| | 1.26 | .531 | .315 | 1.89 | 2.40 | 1.11 |
| 16 | 32 | 13,48 | 8,0 | 57 | 61 | 28,1 |
| | 1.26 | .531 | .315 | 2.24 | 2.40 | 1.11 |
| 18 | 36,5 | 15,87 | 9,6 | 58 | 68 | 31 |
| | 1.44 | .625 | .378 | 2.28 | 2.68 | 1.22 |
| 20 | 39,9 | 19,0 | 11,3 | 61 | 68 | 37,3 |
| | 1.57 | .748 | .445 | 2.40 | 2.68 | 1.47 |
| 22 | 43,1 | 19,0 | 11,3 | 61 | 68 | 37,3 |
| | 1.70 | .748 | .445 | 2.40 | 2.68 | 1.47 |
| 24 | 46,6 | 23,8 | 15,5 | 66 | 76 | 42 |
| | 1.83 | .938 | .610 | 2.60 | 2.99 | 1.65 |
| 28 | 53,4 | 23,8 | 15,5 | 66 | 76 | 42 |
| | 2.10 | .938 | .610 | 2.60 | 2.99 | 1.65 |
| 32 | 60,1 | 31,75 | 23,4 | 72 | 87 | 54 |
| | 2.37 | 1.250 | .921 | 2.83 | 3.42 | 2.12 |
| 36 | 66,3 | 35,0 | 23,4 | 75 | 98 | 57,1 |
| | 2.61 | 1.378 | .921 | 2.95 | 3.86 | 2.25 |
| 40 | 72,5 | 41,25 | 29,9 | 78 | 103 | 63,5 |
| | 2.85 | 1.625 | 1.177 | 3.07 | 4.05 | 2.50 |

Dimensions are mm. over inches

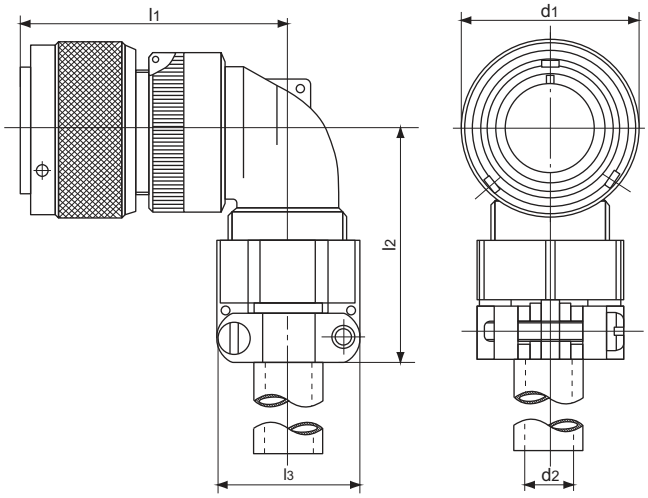
Right angle (90º elbow) plug with a cable clamp for jacketed cables and a rubber coupling nut for protection against dust and impact. CFZGG type also has an individual wire sealing grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ | $d_2$ | | $d_3$ | $l_1$ | $l_2$ | $l_3$ |
|---|---|---|---|---|---|---|---|
| | — | Open | Closed | — | max. | max. | ±0,2 |
| 10SL | 33,5 | 7,93 | 2,38 | 28,5 | 49 | 61 | 22,6 |
| | 1.32 | .312 | .094 | 1.12 | 1.93 | 2.40 | 0.89 |
| 14S | 40,2 | 11,12 | 6,35 | 32,5 | 53 | 61 | 25,8 |
| | 1.58 | .438 | .25 | 1.28 | 2.09 | 2.40 | 1.01 |
| 16 | 44 | 13,48 | 8,0 | 38,9 | 63 | 61 | 28,1 |
| | 1.73 | .531 | .315 | 1.53 | 2.48 | 2.40 | 1.11 |
| 18 | 49 | 15,87 | 9,6 | 43,5 | 64 | 68 | 31 |
| | 1.93 | .625 | .378 | 1.71 | 2.52 | 2.68 | 1.22 |
| 20 | 51,5 | 19,0 | 11,3 | 46 | 67 | 68 | 37,3 |
| | 2.03 | .748 | .445 | 1.81 | 2.64 | 2.68 | 1.47 |
| 22 | 56 | 19,0 | 11,3 | 50,5 | 67 | 68 | 37,3 |
| | 2.20 | .748 | .445 | 1.99 | 2.64 | 2.68 | 1.47 |
| 24 | 60 | 23,8 | 15,5 | 54 | 73 | 76 | 42 |
| | 2.36 | .938 | .610 | 2.12 | 2.87 | 2.99 | 1.65 |
| 28 | 67 | 23,8 | 15,5 | 61 | 73 | 76 | 42 |
| | 2.64 | .938 | .610 | 2.40 | 2.87 | 2.99 | 1.65 |
| 32 | 76 | 31,75 | 23,4 | 67,6 | 78 | 87 | 54 |
| | 2.99 | 1.250 | .921 | 2.66 | 3.07 | 3.42 | 2.12 |
| 36 | 82,3 | 35,0 | 23,4 | 74,3 | 81 | 98 | 57,1 |
| | 3.24 | 1.378 | .921 | 2.92 | 3.19 | 3.86 | 2.25 |
| 40 | 88 | 41,25 | 29,9 | 80 | 84 | 103 | 63,5 |
| | 3.46 | 1.625 | 1.177 | 3.15 | 3.31 | 4.05 | 2.50 |

Dimensions are mm. over inches

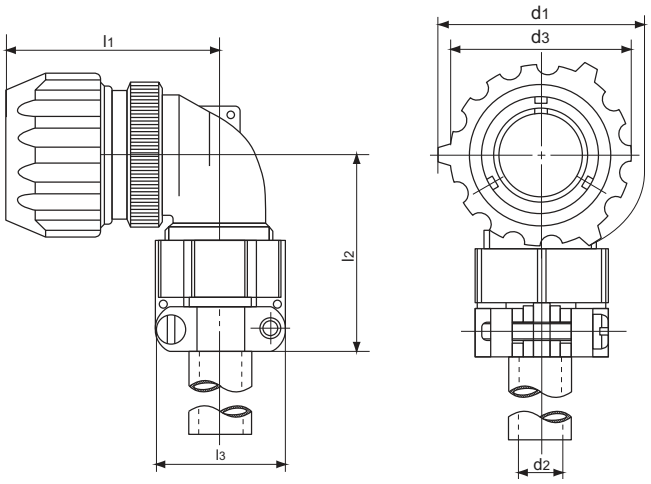
Right angle (90° elbow) plug with an individual wire sealing grommet and a cable clamp with a bushing. AF type has no grommet.




| Shell Size | $d_1$ max. | $d_2$ * max. | $l_1$ max. | $l_2$ max. | $l_3$ max. |
|---|---|---|---|---|---|
| 10SL | 22,8 | 5,6 | 45 | 42 | 22,7 |
| | 0.90 | 0.22 | 1.77 | 1.65 | 0.89 |
| 14S | 29,2 | 7,9 | 47 | 42 | 27,5 |
| | 1.15 | 0.31 | 1.85 | 1.65 | 1.08 |
| 16S | 32 | 11 | 48 | 45 | 30 |
| | 1.26 | 0.43 | 1.89 | 1.77 | 1.18 |
| 16 | 32 | 11 | 57 | 45 | 30 |
| | 1.26 | 0.43 | 2.24 | 1.77 | 1.18 |
| 18 | 36,5 | 14,2 | 58 | 53 | 32,2 |
| | 1.44 | 0.56 | 2.28 | 2.09 | 1.27 |
| 20 | 39,9 | 15,8 | 61 | 53 | 37,5 |
| | 1.57 | 0.62 | 2.40 | 2.09 | 1.48 |
| 22 | 43,1 | 15,8 | 61 | 53 | 37,5 |
| | 1.70 | 0.62 | 2.40 | 2.09 | 1.48 |
| 24 | 46,6 | 19 | 66 | 58 | 43,3 |
| | 1.83 | 0.75 | 2.60 | 2.28 | 1.70 |
| 28 | 53,4 | 19 | 66 | 58 | 43,3 |
| | 2.10 | 0.75 | 2.60 | 2.28 | 1.70 |
| 32 | 60,1 | 23,8 | 72 | 66 | 51,7 |
| | 2.37 | 0.94 | 2.83 | 2.60 | 2.03 |
| 36 | 66,3 | 31,7 | 75 | 69 | 58 |
| | 2.61 | 1.25 | 2.95 | 2.72 | 2.28 |
| 40 | 72,5 | 34,9 | 78 | 95 | 68,5 |
| | 2.85 | 1.37 | 3.07 | 3.74 | 2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

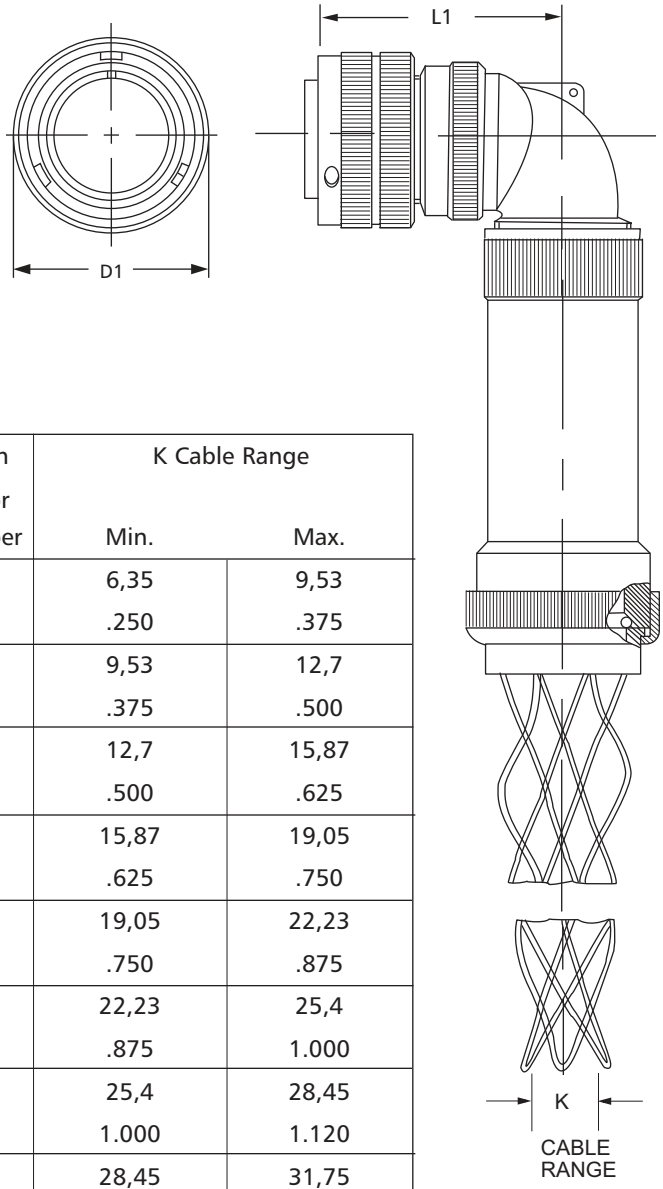
Right angle (90º elbow) plug with an individual wire sealing grommet, cable clamp, bushing and rubber covered coupling nut for protection against dust and impact. AFGG type has no grommet. To be mated only with receptacles having countersunk mounting holes. See pages 197.




| Shell Size | $d_1$ — | $d_2$ * max. | $d_3$ — | $l_1$ max. | $l_2$ max. | $l_3$ max. |
|---|---|---|---|---|---|---|
| 10SL | 33,5 | 5,6 | 28,5 | 49 | 42 | 22,7 |
| | 1.32 | 0.22 | 1.12 | 1.93 | 1.65 | 0.89 |
| 14S | 40,2 | 7,9 | 35,2 | 53 | 42 | 27,5 |
| | 1.58 | 0.31 | 1.38 | 2.09 | 1.65 | 1.08 |
| 16 | 44 | 11 | 38,9 | 63 | 45 | 30 |
| | 1.73 | 0.43 | 1.53 | 2.48 | 1.77 | 1.18 |
| 18 | 49 | 14,2 | 43,5 | 64 | 53 | 32,2 |
| | 1.93 | 0.56 | 1.71 | 2.52 | 2.09 | 1.27 |
| 20 | 51,5 | 15,8 | 46 | 67 | 53 | 37,5 |
| | 2.03 | 0.62 | 1.81 | 2.64 | 2.09 | 1.48 |
| 22 | 56 | 15,8 | 50,5 | 67 | 53 | 37,5 |
| | 2.20 | 0.62 | 1.99 | 2.64 | 2.09 | 1.48 |
| 24 | 60 | 19 | 54 | 73 | 58 | 43,3 |
| | 2.36 | 0.75 | 2.12 | 2.87 | 2.28 | 1.70 |
| 28 | 67 | 19 | 61 | 73 | 58 | 43,3 |
| | 2.64 | 0.75 | 2.40 | 2.87 | 2.28 | 1.70 |
| 32 | 76 | 23,8 | 67,6 | 78 | 66 | 51,7 |
| | 2.99 | 0.94 | 2.66 | 3.07 | 2.60 | 2.03 |
| 36 | 82,3 | 31,7 | 74,3 | 81 | 69 | 58 |
| | 3.24 | 1.25 | 2.92 | 3.19 | 2.72 | 2.28 |
| 40 | 88 | 34,9 | 80 | 84 | 95 | 68,5 |
| | 3.46 | 1.37 | 3.15 | 3.31 | 3.74 | 2.70 |

* Max permissible outside diameter of cable
Dimensions are mm. over inches

Right angle plug for terminating jacketed cable. Long LC backshell with internal adapter suitable for various sizes of cable, grommet, compression ring and a cord grip included. LCG same as LC but without the wire sealing grommet and compression ring.

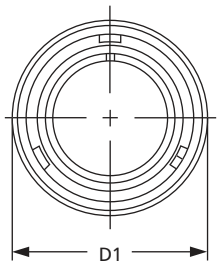


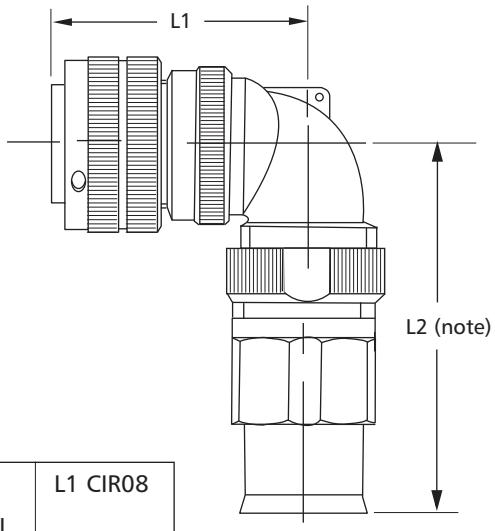

| Shell Size | $D_1$ Maximum | L - CIR08 Approximate |
|---|---|---|
| 10SL | 22,8<br>0.90 | 38,1<br>1.50 |
| 14S | 29,2<br>1.15 | 39,7<br>1.56 |
| 16S | 33,0<br>1.30 | 42,9<br>1.69 |
| 16 | 33,0<br>1.30 | 52,4<br>2.06 |
| 18 | 36,5<br>1.44 | 54,0<br>2.13 |
| 20 | 39,9<br>1.57 | 59,7<br>2.35 |
| 22 | 43,1<br>1.70 | 59,1<br>2.33 |
| 24 | 46,6<br>1.84 | 63,9<br>2.52 |
| 28 | 53,4<br>2.10 | 63,9<br>2.52 |
| 32 | 60,1<br>2.37 | 69.8<br>2.75 |
| 36 | 66,3<br>2.61 | 73.0<br>2.87 |
| 40 | 72,4<br>2.85 | 76.1<br>3.00 |

| K Suffix in Connector Part Number | K Cable Range Min. | Max. |
|---|---|---|
| K0 | 6,35<br>.250 | 9,53<br>.375 |
| K1 | 9,53<br>.375 | 12,7<br>.500 |
| K2 | 12,7<br>.500 | 15,87<br>.625 |
| K3 | 15,87<br>.625 | 19,05<br>.750 |
| K4 | 19,05<br>.750 | 22,23<br>.875 |
| K5 | 22,23<br>.875 | 25,4<br>1.000 |
| K6 | 25,4<br>1.000 | 28,45<br>1.120 |
| K7 | 28,45<br>1.120 | 31,75<br>1.250 |
| K8 | 32,77<br>1.290 | 38,1<br>1.500 |
| K9 | 39.62<br>1.560 | 41,28<br>1.625 |
| K10 | 41.28<br>1.625 | 44,45<br>1.750 |

Dimensions are mm. over inches

Plug for terminating conduit. Right angle NM backshell with adapter and backnut assembly to seal and grip on the jacket of a non-metalic flexible *CN-P type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. NMG same as NM but without a grommet or compression ring.




| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

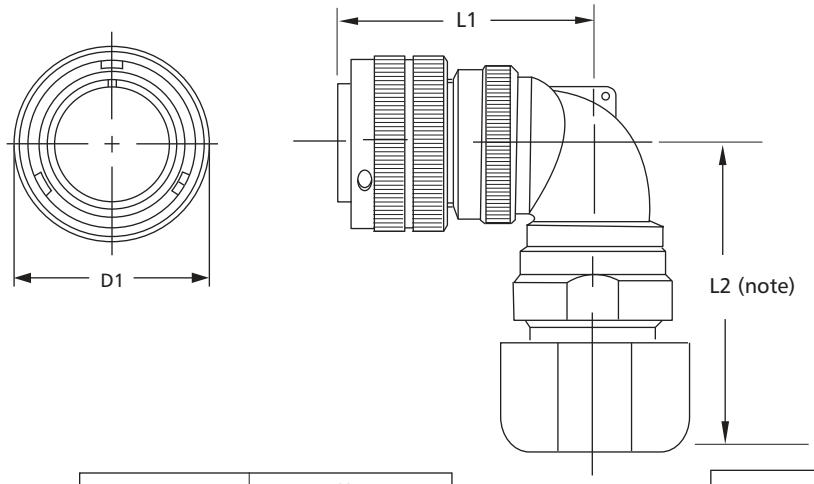
| Conduit (CN-P Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Note: Dimension "L2" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | L1 CIR08 Approximate |
|---|---|
| 10SL | 38,1<br>1.50 |
| 14S | 39,7<br>1.56 |
| 16S | 42,9<br>1.69 |
| 16 | 52,4<br>2.06 |
| 18 | 54<br>2.13 |
| 20 | 59,7<br>2.35 |
| 22 | 59,1<br>2.33 |
| 24 | 63,9<br>2.52 |
| 28 | 63,9<br>2.52 |
| 32 | 69,8<br>2.75 |
| 36 | 73<br>2.87 |
| 40 | 76,1<br>3.00 |

Dimensions are mm. over inches

Plug for terminating conduit. Right angle RK backshell with adapter and backnut assembly to seal and grip on the jacket of a steel core flexible *EF type Anaconda sealtite conduit*. A wire sealing grommet and compression ring is included. ARK same as RK but without a grommet or compression ring.




| Shell Size | $D_1$ Maximum |
|---|---|
| 10SL | 22,8<br>0.90 |
| 14S | 29,2<br>1.15 |
| 16S | 33,0<br>1.30 |
| 16 | 33,0<br>1.30 |
| 18 | 36,5<br>1.44 |
| 20 | 39,9<br>1.57 |
| 22 | 43,1<br>1.70 |
| 24 | 46,6<br>1.84 |
| 28 | 53,4<br>2.10 |
| 32 | 60,1<br>2.37 |
| 36 | 66,3<br>2.61 |
| 40 | 72,4<br>2.85 |

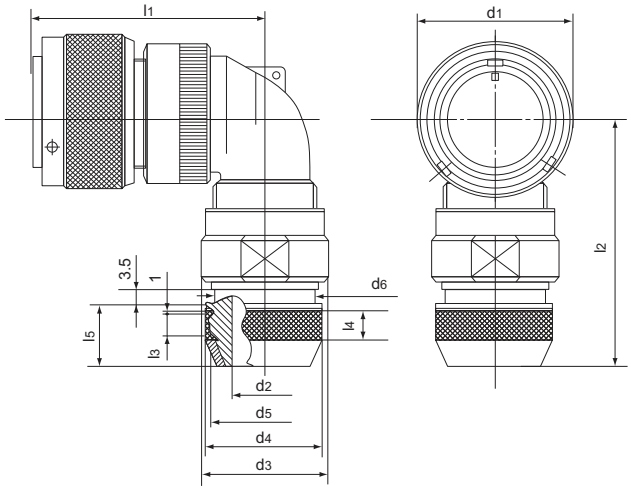
| Conduit (EF Type) Trade Size | Suffix in Connector Part Number |
|---|---|
| 3/8 | (038) |
| 1/2 | (050) |
| 3/4 | (075) |
| 1 | (100) |
| 1 1/4 | (125) |
| 1 1/2 | (150) |
| 2 | (200) |

Note: Dimension "L2" is dependent on conduit size used with each shell size. Please consult our Customer Service Department.

| Shell Size | L1 CIR08 Approximate |
|---|---|
| 10SL | 38,1<br>1.50 |
| 14S | 39,7<br>1.56 |
| 16S | 42,9<br>1.69 |
| 16 | 52,4<br>2.06 |
| 18 | 54<br>2.13 |
| 20 | 59,7<br>2.35 |
| 22 | 59,1<br>2.33 |
| 24 | 63,9<br>2.52 |
| 28 | 63,9<br>2.52 |
| 32 | 69,8<br>2.75 |
| 36 | 73<br>2.87 |
| 40 | 76,1<br>3.00 |

Dimensions are mm. over inches

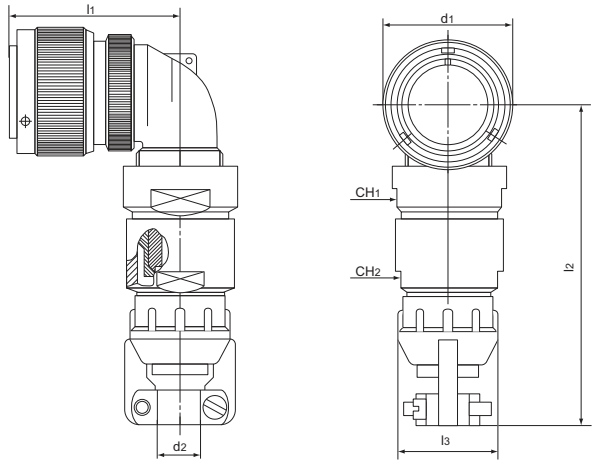
Right angle (90º elbow) plug with an individual wire sealing grommet, RFI shield spring and a special backshell for shield braid and heat shrinkable tubing termination (for shielding characteristics, see page 12). CIR08SB type has no RFI shield spring.




| Shell Size | $d_1$ max. | $d_2$ min. | $d_3$ max. | $d_4$ + 0,5 - 0 | $d_5$ Thread | $d_6$ max. | $l_1$ max. | $l_2$ ~ | $l_3$ min. | $l_4$ + 0,5 | $l_5$ + 0,1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 8,6 | 22 | 18,5 | M16x1 | 16,3 | 45 | 52,1 | 4,5 | 5,5 | 17 |
| | 0.90 | 0.34 | 0.87 | 0.73 | | 0.64 | 1.77 | 2.05 | 0.18 | 0.22 | 0.67 |
| 14S | 29,2 | 10,6 | 25 | 22 | M20x1 | 20 | 47 | 53,7 | 5 | 7 | 17 |
| | 1.15 | 0.42 | 0.98 | 0.87 | | 0.79 | 1.85 | 2.11 | 0.20 | 0.27 | 0.67 |
| 16S | 32 | 13,5 | 28 | 25 | M23x1 | 23 | 48 | 57,3 | 6 | 8 | 18,5 |
| | 1.26 | 0.53 | 1.10 | 0.98 | | 0.90 | 1.89 | 2.25 | 0.24 | 0.31 | 0.73 |
| 16 | 32 | 13,5 | 28 | 25 | M23x1 | 23 | 57 | 57,3 | 6 | 8 | 18,5 |
| | 1.26 | 0.53 | 1.10 | 0.98 | | 0.90 | 2.24 | 2.25 | 0.24 | 0.31 | 0.73 |
| 18 | 36,5 | 14,6 | 31 | 28 | M26x1 | 24,5 | 58 | 60,7 | 6 | 8 | 18,5 |
| | 1.44 | 0.57 | 1.22 | 1.10 | | 0.96 | 2.28 | 2.39 | 0.24 | 0.31 | 0.73 |
| 20 | 39,9 | 18,5 | 36 | 32 | M30x1 | 28,5 | 61 | 62,5 | 6 | 10 | 18,5 |
| | 1.57 | 0.73 | 1.42 | 1.26 | | 1.12 | 2.40 | 2.46 | 0.24 | 0.39 | 0.73 |
| 22 | 43,1 | 20,8 | 38 | 34 | M32x1 | 30,5 | 61 | 63,8 | 6 | 10 | 18,5 |
| | 1.70 | 0.82 | 1.50 | 1.34 | | 1.20 | 2.40 | 2.51 | 0.24 | 0.39 | 0.73 |
| 24 | 46,6 | 24,6 | 44 | 38 | M36x1 | 34,5 | 66 | 66 | 6 | 10 | 18,5 |
| | 1.83 | 0.97 | 1.73 | 1.50 | | 1.36 | 2.60 | 2.60 | 0.24 | 0.39 | 0.73 |
| 28 | 53,4 | 27 | 48 | 41 | M39x1 | 37,5 | 66 | 67,6 | 6 | 10 | 18,5 |
| | 2.10 | 1.06 | 1.89 | 1.61 | | 1.48 | 2.60 | 2.66 | 0.24 | 0.39 | 0.73 |
| 32 | 60,1 | 33,3 | 56 | 48 | M45x1 | 44 | 72 | 74 | 6 | 10 | 18,5 |
| | 2.37 | 1.31 | 2.20 | 1.89 | | 1.73 | 2.83 | 2.91 | 0.24 | 0.39 | 0.73 |
| 36 | 66,3 | 38,5 | 61 | 55 | M52x1 | 51 | 75 | 77,1 | 6 | 10 | 18,5 |
| | 2.61 | 1.51 | 2.40 | 2.16 | | 2.0 | 2.95 | 3.03 | 0.24 | 0.39 | 0.73 |
| 40 | 72,5 | 46 | 68 | 62 | M59x1 | 58 | 78 | 81,1 | 6 | 10 | 18,5 |
| | 2.85 | 1.81 | 2.68 | 2.44 | | 2.28 | 3.07 | 3.19 | 0.24 | 0.39 | 0.73 |

Dimensions are mm. over inches

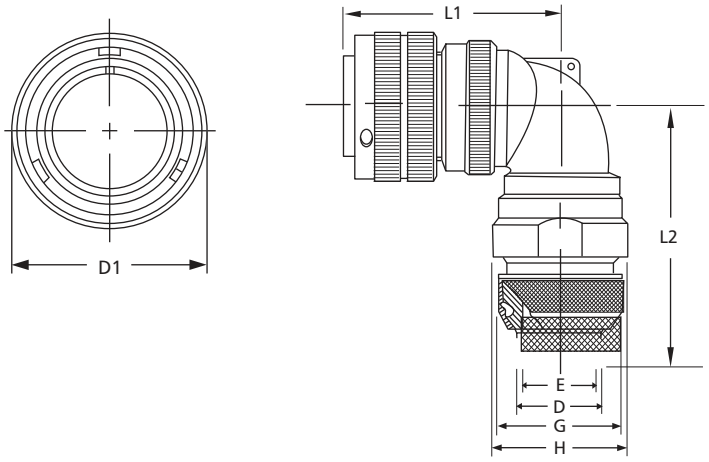
Right angle (90° elbow) plug with an individual wire sealing grommet, RFI shield spring and a special backshell and cable clamp for shielded jacketed cable (for shielding characteristics, see page 12). CIR08 type has no shield spring.




| Shell Size | $d_1$ max. | $d_2$ open | $d_2$ closed | $l_1$ max. | $l_2$ ~ | $l_3$ + 0,2 | CH. 1 + 0 - 0,2 | CH. 2 + 0 - 0,2 |
|---|---|---|---|---|---|---|---|---|
| 18 | 36,5 | 15,87 | 9,6 | 58 | 120 | 31 | 27 | 30 |
| | 1.44 | 0.625 | 0.375 | 2.28 | 4.72 | 1.22 | 1.06 | 1.18 |
| 20 | 39,9 | 19 | 11,3 | 61 | 120 | 37.3 | 32 | 32 |
| | 1.57 | 0.748 | 0.445 | 2.40 | 4.72 | 1.47 | 1.26 | 1.26 |
| 22 | 43,1 | 19 | 11,3 | 61 | 120 | 37.3 | 32 | 32 |
| | 1.70 | 0.748 | 0.445 | 2.40 | 4.72 | 1.47 | 1.26 | 1.26 |
| 24 | 46,6 | 23,8 | 15,5 | 66 | 130 | 42 | 36 | 36 |
| | 1.83 | 0.938 | 0.610 | 2.60 | 5.12 | 1.65 | 1.42 | 1.42 |
| 28 | 53,4 | 23,8 | 15,5 | 66 | 130 | 42 | 36 | 36 |
| | 2.10 | 0.938 | 0.610 | 2.60 | 5.12 | 1.65 | 1.42 | 1.42 |
| 32 | 60,1 | 31,75 | 23,4 | 72 | 145 | 54 | 46 | 50 |
| | 2.37 | 1.25 | 0.921 | 2.83 | 5.71 | 2.12 | 1.81 | 1.97 |
| 36 | 66,3 | 35 | 23,4 | 75 | 157 | 57.1 | 50 | 55 |
| | 2.61 | 1.378 | 0.921 | 2.95 | 6.18 | 2.25 | 1.97 | 2.16 |

Dimensions are mm. over inches

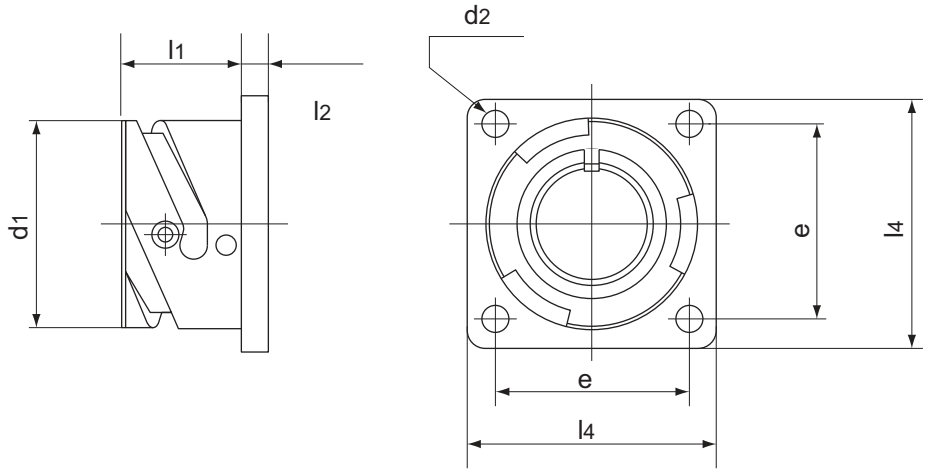
Plug for terminating braided shield. Right angle backshell with a swivel coupling nut and adapter suitable for use with heat shrink tubing or boot. The backshell includes a knurled extension for the shield termination via a tinel lock ring (not supplied). A wire sealing grommet is included. ASBT same as SBT but without a grommet.




| Shell Size | $D_1$ Maximum | D Maximum | E+/- 0,25 .010 | F | G | H +/- 0,5 .020 | L1 CIR08 CIRG08 Approximate | L2 CIR08 CIRG08 Approximate | Tinel Ring P/N |
|---|---|---|---|---|---|---|---|---|---|
| 10SL | 22,8 | 11,1 | 7,9 | 16,3 | 18,5 | 22,0 | 38,1 | 61,8 | TR 05 |
| | 0.90 | .44 | 3.12 | .64 | .73 | .866 | 1.50 | 2.43 | |
| 14S | 29,2 | 14,3 | 11,1 | 20,0 | 22,0 | 24,8 | 39,7 | 63,4 | TR 07 |
| | 1.15 | .56 | .437 | .79 | .87 | .976 | 1.56 | 2.50 | |
| 16S | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 42,9 | 67,0 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 1.69 | 2.64 | |
| 16 | 33,0 | 15,9 | 12,7 | 23,0 | 25,0 | 27,8 | 52,4 | 67,0 | TR 08 |
| | 1.30 | .63 | .500 | .91 | .98 | 1.094 | 2.06 | 2.64 | |
| 18 | 36,5 | 19,1 | 15,9 | 24,5 | 28.0 | 30,8 | 54,0 | 70,6 | TR 10 |
| | 1.44 | .75 | .625 | .97 | 1.10 | 1.213 | 2.13 | 2.78 | |
| 20 | 39,9 | 22,3 | 19,1 | 28.5 | 32,0 | 34,8 | 59,7 | 63,7 | TR 12 |
| | 1.57 | .88 | .750 | 1.12 | 1.26 | 1.370 | 2.35 | 2.51 | |
| 22 | 43,1 | 25,4 | 22,2 | 30,5 | 34,0 | 37,8 | 59,1 | 65,0 | TR 14 |
| | 1.70 | 1.00 | .875 | 1.20 | 1.34 | 1.488 | 2.33 | 2.56 | |
| 24 | 46,6 | 28,7 | 25,4 | 34,5 | 38,0 | 40,8 | 63,9 | 67,4 | TR 16 |
| | 1.84 | 1.13 | 1.00 | 1.36 | 1.50 | 1.606 | 2.52 | 2.65 | |
| 28 | 53,4 | 31,8 | 28,6 | 37,5 | 41,0 | 47,8 | 63,9 | 69,4 | TR 18 |
| | 2.10 | 1.25 | 1.125 | 1.48 | 1.61 | 1.881 | 2.52 | 2.73 | |
| 32 | 60,1 | 31,8 | 28,6 | 44,0 | 48,0 | 53,8 | 69,8 | 75,4 | TR 18 |
| | 2.37 | 1.25 | 1.125 | 1.73 | 1.89 | 2.118 | 2.75 | 2.97 | |
| 36 | 66,3 | 44,5 | 41,3 | 51,0 | 55,0 | 60,8 | 73,0 | 78,0 | Not |
| | 2.61 | 1.75 | 1.625 | 2.01 | 2.17 | 2.394 | 2.87 | 3.07 | Available |
| 40 | 72,4 | 50.8 | 47,6 | 58,0 | 62,0 | 67,8 | 76,1 | 82,5 | Not |
| | 2.85 | 2.00 | 1.875 | 2.28 | 2.44 | 2.669 | 3.00 | 3.25 | Available |

Dimensions are mm. over inches

Dummy receptacle. For countersunk mounting holes, see page 197.




| Shell Size | $d_1$ +0 -0,15 | $d_2$ H13 | e ±0,1 | $l_1$ +0,4 -0 | $l_2$ ±0,2 | $l_4$ ±0,3 |
|---|---|---|---|---|---|---|
| 10SL | 18,2 | 3,2 | 18,2 | 14,2 | 2,8 | 25,4 |
| | 0.72 | 0.12 | 0.72 | 0.56 | 0.11 | 1.00 |
| 14S | 24,6 | 3,2 | 23 | 14,2 | 3,2 | 30 |
| | 0.97 | 0.12 | 0.90 | 0.56 | 0.12 | 1.81 |
| 16S | 27,4 | 3,2 | 24,6 | 14,2 | 3,2 | 32,5 |
| | 1.08 | 0.12 | 0.97 | 0.56 | 0.12 | 1.28 |
| 16 | 27,4 | 3,2 | 24,6 | 19 | 3,2 | 32,5 |
| | 1.08 | 0.12 | 0.97 | 0.75 | 0.12 | 1.28 |
| 18 | 30,8 | 3,2 | 27 | 19 | 4 | 35 |
| | 1.21 | 0.12 | 1.06 | 0.75 | 0.16 | 1.38 |
| 20 | 34,2 | 3,2 | 29,4 | 19 | 4 | 38 |
| | 1.35 | 0.12 | 1.16 | 0.75 | 0.16 | 1.496 |
| 22 | 37,4 | 3,2 | 31,8 | 19 | 4 | 41 |
| | 1.47 | 0.12 | 1.25 | 0.75 | 0.16 | 1.75 |
| 24 | 40,9 | 3,7 | 34,9 | 20,6 | 4 | 44,5 |
| | 1.61 | 0.14 | 1.37 | 0.81 | 0.16 | 2.00 |
| 28 | 46,7 | 3,7 | 39,7 | 20,6 | 4 | 50,8 |
| | 1.84 | 0.14 | 1.56 | 0.81 | 0.16 | 2.00 |
| 32 | 53,4 | 4,3 | 44,5 | 22,2 | 4 | 57 |
| | 2.10 | 0.17 | 1.75 | 0.87 | 0.16 | 2.24 |
| 36 | 59,6 | 4,3 | 49,2 | 22,2 | 4 | 63,5 |
| | 2.35 | 0.17 | 1.94 | 0.87 | 0.16 | 2.50 |
| 40 | 65,5 | 4,3 | 55,5 | 22,2 | 4 | 69,9 |
| | 2.58 | 0.17 | 2.18 | 0.87 | 0.16 | 2.75 |

Dimensions are mm. over inches

# Crimp Reduction Sleeves

Used to reduce the size of the contact crimp bucket to accept smaller gauge wires.

| VEAM Part Number | From Wire Size | To Wire Size |
|---|---|---|
| 45378 | 16 AWG | 20 AWG |
| 45370 | 16 AWG | 22 AWG |
| 47227-16-24 | 16 AWG | 24 AWG |
| 47227-16-0.12 | 16 AWG | 26 AWG |
| 45372 | 12 AWG | 16 AWG |
| LV242999-142 | 12 AWG | 18 AWG |
| LV242999-152 | 12 AWG | 20 AWG |
| LV242999-172 | 10 AWG | 16 AWG |
| LV242999-12 | 8 AWG | 10 AWG |
| 46661 | 8 AWG | 12 AWG |
| LV242999-122 | 8 AWG | 14 AWG |
| LV242999-132 | 8 AWG | 16 AWG |
| 45374 | 8 AWG | 6 $mm^2$ |
| 46263 | 8 AWG | 4 $mm^2$ |
| 47227-8-2.5 | 8 AWG | 2.5 $mm^2$ |
| 47227 | 8 AWG | 1.5 $mm^2$ |
| LV242999-32 | 8SP | 12 AWG |
| 46269 | 4 AWG | 6 AWG |
| 46660 | 4 AWG | 8 AWG |
| LV242999-192 | 4 AWG | 10 AWG |
| 46662 | 0 AWG | 6 AWG |
| 46665 | 4 AWG | 16 $mm^2$ |
| 46666 | 4 AWG | 10 $mm^2$ |
| 46667 | 4 AWG | 6 $mm^2$ |
| 47227-2-4 | 2 AWG | 4 AWG |
| 47227-0-8 | 0 AWG | 8 AWG |
| 47227-8-10 | 8 AWG | 10 AWG |
| 47227-4-4 | 4 AWG | 4 $mm^2$ |

| VEAM Part Number | From Wire Size | To Wire Size |
|---|---|---|
| 45373 | 0 AWG | 2 AWG |
| LV242999-82 | 0 AWG | 4 AWG |
| LV242999-92 | 0 AWG | 6 AWG |
| LV242999-102 | 0 AWG | 8 AWG |
| 46664 | 0 AWG | 16 $mm^2$ |
| 47227-53-20 | 0 AWG | 20 $mm^2$ |
| 45375 | 0 AWG | 25 $mm^2$ |
| 45376 | 0 AWG | 35 $mm^2$ |
| 47227-7025 | 2/0 AWG | 25 $mm^2$ |
| 47227-6-1.5 | 6 $mm^2$ | 1.5 $mm^2$ |
| 47227-6-2.5 | 6 $mm^2$ | 2.5 $mm^2$ |
| 45379 | 10 $mm^2$ | 12 AWG |
| 47227-16-2.5 | 16 $mm^2$ | 2.5 $mm^2$ |
| 47227-16-4 | 16 $mm^2$ | 4 $mm^2$ |
| 47227-16-6 | 16 $mm^2$ | 6 $mm^2$ |
| 47227-16-10 | 16 $mm^2$ | 10 $mm^2$ |
| 47227-25-6 | 25 $mm^2$ | 6 $mm^2$ |
| 47227-25-10 | 25 $mm^2$ | 10 $mm^2$ |
| 47227-25-16 | 25 $mm^2$ | 16 $mm^2$ |
| 47227-50-25 | 50 $mm^2$ | 25 $mm^2$ |
| 47227-95-70 | 95 $mm^2$ | 70 $mm^2$ |
| 47227-150-70 | 150 $mm^2$ | 70 $mm^2$ |
| 47227-150-95 | 150 $mm^2$ | 95 $mm^2$ |
| 46266 | 50 $mm^2$ | 16 $mm^2$ |
| 46264 | 50 $mm^2$ | 35 $mm^2$ |

NOTE: Add suffix T9 for silver plating, T12 for gold plating. For other options, consult Customer Service Department.

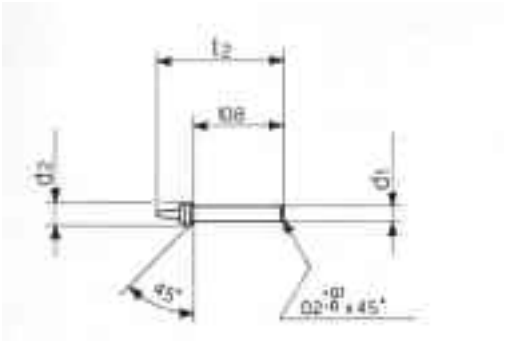
# Contact Hole Plugs

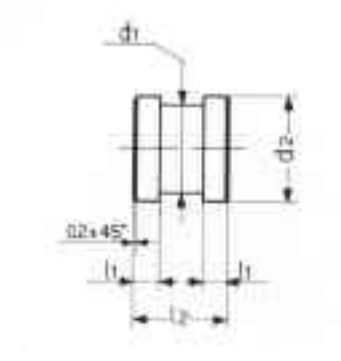
Used to fill a grommet or insert cavity in lieu of a contact to maintain the environmental seal.

| Contact Size AWG | Contact Size DIN | Hole Plugs For Grommet | Color | Hole Plugs For Insert | Color |
|---|---|---|---|---|---|
| 20 | 10 | 10-101033-11 | Red | 46808-20 | Red |
| 16S, 16 | 15, 15S | 10-101033-12 | Blue | 46808-16 | Blue |
| 16S, 16 High Density Inserts | | 10-101033-11 | Red | LMB-G-3 | Blue |
| 12 | 25 | 10-101033-13 | Yellow | 10-101033-13 | Yellow |
| 8 | 60, 100 | 10-101033-14 | White | 10-305045 | White |
| 4 | 160 | 10-101033-15 | Green | 10-305045-4 | White |
| 0 | 500 | 10-101033-16 | Black | 10-305065-0 | Black |
| 0 (Ground) | | | | 10-305045-01 | White |

Specifications and dimensions subject to change
Dimensions shown in mm.

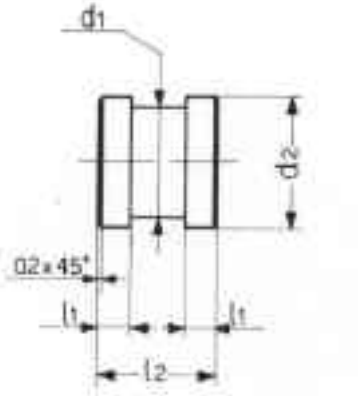
## Wire Hole Plugs for F80 and Solder Inserts




| Contact Size | $d_1$ | $d_2$ | $l_1$ | $l_2$ | VEAM P/N |
|---|---|---|---|---|---|
| 20 | 1,65 | 2,6 | _ | 15,2 | 46808-20 |
| 16 | 2,2 | 2,6 | _ | 15,7 | 46808-16 |
| 12 | 3,7 | 4,6 | 3,2 | 11,9 | VG 95234 B12 |
| 8 | 6,4 | 7,6 | 3,1 | 11,8 | 10-305045 |
| 4 | 9,7 | 10,9 | 3,1 | 11,8 | 10-305045-4 |
| 0 | 13,5 | 15 | 4,3 | 14,3 | 10-305045-0 |
| DM | 14,5 | 16 | 4,3 | 14,3 | 10-305045-01 |

## Wire Hole Plugs for Grommets

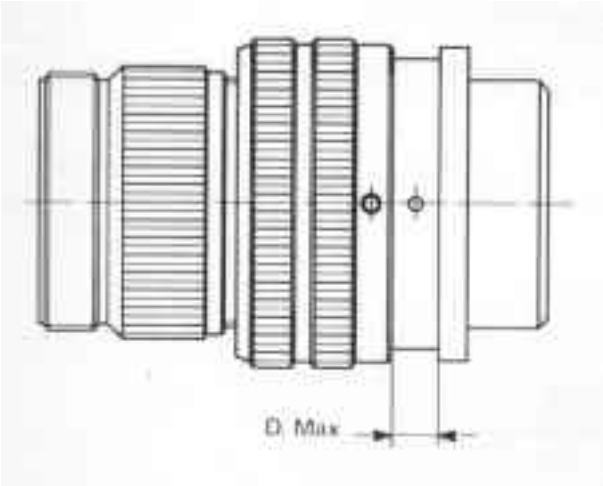



| Contact Size | | $d_1$ ±0,1 | $d_2$ ±0,2 | $l_1$ ±0,1 | $l_2$ ±0,3 | Color | VG P/N* | VEAM P/N |
|---|---|---|---|---|---|---|---|---|
| DIN | AWG | | | | | | | |
| 10 | — | 2,3 | 3 | 2,4 | 9,7 | Red | VG 95234 B20 | 10-101033-11 |
| 15S/15 | 16S/16 | 2,8 | 3,7 | 3,2 | 11,9 | Blue | VG 95234 B16 | 10-101033-12 |
| 25 | 12 | 3,7 | 4,6 | 3,2 | 11,9 | Yellow | VG 95234 B12 | 10-101033-13 |
| 60/100 | 8 | 5 | 5,8 | 3,2 | 11,9 | White | VG 95234 B8 | 10-101033-14 |
| 160 | 4 | 7,6 | 8,5 | 3,2 | 11,9 | Green | VG 95234 B4 | 10-101033-15 |
| 500 | 0 | 12,8 | 13,5 | 3,2 | 11,9 | Black | VG 95234 B0 | 10-101033-16 |

## Rear Mounting Data-Maximum Panel Thickness

| Dimension D | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | CIR 00/020 | CIR 030 | GG/D Max. Mated with CIR 30 | CIR TB | D MAX* | D MAX | D MAX with rubber C/N 03/030 type | D MAX CIR-TB |
| 10SL | 3.7 | 7.2 | 4.0 | 10.0 | 3.70 | 7.2 | 4 | 10 |
| 14S | 3.7 | 7.2 | 3.5 | 9.6 | 3.70 | 7.2 | 3.5 | 9.6 |
| 16S | 3.7 | 7.2 | N/A | 9.6 | 3.70 | 7.2 | N/A | 9.6 |
| 16 | 3.7 | 7.5 | 3.5 | 13.8 | 3.70 | 7.5 | 3.5 | 13.8 |
| 18 | 3.7 | 7.5 | 3.0 | 13.0 | 3.70 | 7.5 | 3 | 13 |
| 20 | 3.7 | 7.5 | 3.0 | 13.0 | 3.70 | 7.5 | 3 | 13 |
| 22 | 3.7 | 7.5 | 3.0 | 13.0 | 3.70 | 7.5 | 3 | 13 |
| 24 | 5.4 | 7.5 | 1.5 | 11.4 | 5.25 | 7.5 | 1.5 | 11.4 |
| 28 | 5.4 | 8.2 | 2.5 | 12.4 | 5.25 | 8.2 | 2.5 | 12.4 |
| 32 | 6.1 | 7.5 | 1.0 | 9.0 | 6.10 | 7.5 | 1 | 9 |
| 36 | 6.1 | 7.5 | 1.0 | 9.0 | 6.10 | 7.5 | 1 | 9 |
| 40 | 6.0 | 7.5 | 1.0 | 9.0 | 6 | 7.5 | 1 | 9 |

** Dimensions are only valid for rear mounting of the note 1 connectors.*



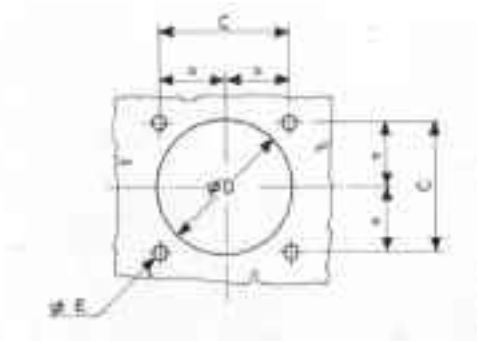



Table 1: Panel cut-out dimensions for CIR-CIRS 02-020 connectors.

| Size | 10SL | 14S | 16S/16 | 18 | 20 | 22 | 24 | 28 | 32 | 36 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C ±0,1 | 18.2 | 23 | 24.6 | 27 | 29.4 | 31.8 | 34.9 | 39.7 | 44.5 | 49.2 | 55.5 |
| Ø D | 17 | 20 | 23 | 26.5 | 30 | 33 | 36 | 42 | 48.5 | 55 | 61 |
| Ø E For Flange with Thru Holes | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.9 | 3.9 | 4.5 | 4.5 | 4.5 |
| Ø E For Flange with Threaded Holes | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |

Table 2: Panel cut-out dimensions for CIR-CIRS 03-030-038 connectors.

| Size | 10SL | 14S | 16S/16 | 18 | 20 | 22 | 24 | 28 | 32 | 36 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C ±0,1 | 18.2 | 23 | 24.6 | 27 | 29.4 | 31.8 | 34.9 | 39.7 | 44.5 | 49.2 | 55.5 |
| Ø D | 19.1 | 25.5 | 28.3 | 31.7 | 35 | 38.3 | 41.8 | 47.6 | 54.3 | 60.5 | 66.4 |
| Ø E For Flange with Thru Holes | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.9 | 3.9 | 4.5 | 4.5 | 4.5 |
| Ø E For Flange with Threaded Holes | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 5.5 | 5.5 | 5.5 | 5.5 |

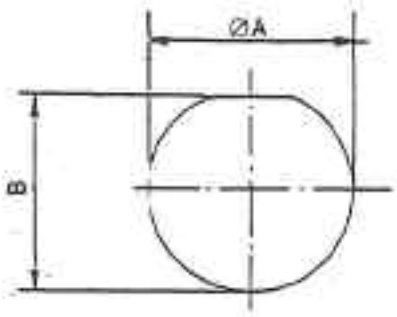
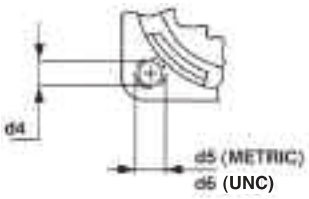



Table 3: Panel cut-out dimensions for CIR-CIRS 07-070-078 connectors.

| Size | 10SL | 14S | 16S/16 | 18 | 20 | 22 | 24 | 28 | 32 | 36 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ØA $^{+0.25}_{-0}$ | 22.4 | 28.75 | 31.95 | 35.1 | 38.3 | 41.45 | 44.65 | 51 | 57.35 | 63.7 | 70.5 |
| B $^{+0}_{-0.35}$ | 21 | 27.4 | 30.95 | 33.75 | 36.85 | 40.05 | 43.35 | 49.55 | 55.95 | 62.35 | 68.55 |

For every flanged receptacle, a choice of mounting hole types exists. These tables identify the prefix part numbers of the types available.




## Table 1

Through Mounting Holes

| Shell Size | d1 H13 mm | d1 +.004 inches |
|---|---|---|
| 10SL | 3.2 | .126 |
| 14S | 3.2 | .126 |
| 16S | 3.2 | .126 |
| 16 | 3.2 | .126 |
| 18 | 3.2 | .126 |
| 20 | 3.2 | .126 |
| 22 | 3.2 | .126 |
| 24 | 3.7 | .146 |
| 28 | 3.7 | .146 |
| 32 | 4.3 | .169 |
| 36 | 4.3 | .169 |
| 40 | 4.3 | .169 |

Receptacle Identification • CIR030/CIR038/CIRTB

| Through mounting holes types | Threaded mounting holes types |
|---|---|
| CIR 030FP | CIR 030 |
| CIR 030AFP | CIR 030A |
| CIR 030CFFP | CIR 030CF |
| CIR 030CFZFP | CIR 030CFZ |
| CIR 030FFP | CIR 030F |
| CIR 030GFP | CIR 030G |
| CIR 030G2FP | CIR 030G2 |
| CIR 030LCFFP | CIR 030LCF |
| CIR 030LCFZFP | CIR 030LCFZ |
| CIR 030RFP | CIR 030R |
| CIR 030RVFP | CIR 030RV |
| CIR 030SBFP | CIR 030SB |
| CIR 030YMFP | CIR 030YM |
| CIR 038FFP | CIR 038F |
| CIR 038RFP | CIR 030R |
| CIRTBFP | CIR TB |

## Table 2

Threaded Mounting Holes

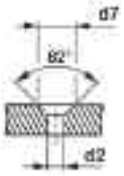
Mounting hole code
CIR030 =
metric thread
CIR030UN =
US (inch) thread
CIR030FP =
thru holes

| Shell Size | d6 thread | d5 thread | d4 minor dia.of d5 mm | d4 minor dia.of d5 inches |
|---|---|---|---|---|
| 10SL | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 14S | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 16S | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 16 | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 18 | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 20 | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 22 | 8-32UNC | M4 | 3.2 - 3.4 | .126-.134 |
| 24 CIR030 | 10-24UNC | M4 | 4.13-4.33 | .126-.134 |
| 24 CIR020 | 10-24UNC | M5 | 4.13-4.33 | .163- .170 |
| 28 | 10-24UNC | M5 | 4.13-4.33 | .163- .170 |
| 32 | 1/4-20UNC | M5 | 4.13-4.33 | .163- .170 |
| 36 | 1/4-20UNC | M5 | 4.13-4.33 | .163- .170 |
| 40 | 1/4-20UNC | M5 | 4.13-4.33 | .163- .170 |

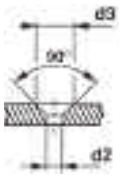
Receptacle Identification • CIR00/CIR020 - Threaded Holes

| Through mounting holes type | Threaded mounting holes type (d5) | Threaded mounting holes types (d6) |
|---|---|---|
| CIR 00A | CIR 00AFF | CIR 00AUN |
| CIR 00CF | CIR 00CFFF | CIR 00CFUN |
| CIR 00CFZ | CIR 00CFZFF | CIR 00CFZUN |
| CIR 00F | CIR 00FFF | CIR 00FUN |
| CIR 00G | CIR 00GFF | CIR 00GUN |
| CIR 00G2 | CIR 00G2FF | CIR 00G2UN |
| CIR 00LCF | CIR 00LCFFF | CIR 00LCFUN |
| CIR 00LCFZ | CIR 00LCFZFF | CIR 00LCFZUN |
| CIR 00LF | CIR 00LFFF | CIR 00LFUN |
| CIR 00R | CIR 00RFF | CIR 00RUN |
| CIR 00LR | CIR 00LRFF | CIR 00LRUN |
| CIR 00RV | CIR 00RVFF | CIR 00RVUN |
| CIR 00SB | CIR 00SBFF | CIR 00SBUN |
| CIR 020R | CIR 020RFF | CIR 020RUN |
| CIR 020YM | CIR 020YMFF | CIR 020YMUN |

Countersunk Mounting Holes For UNC Screws




Countersunk Mounting Holes For Metric Screws




## Table 3

| Shell Size | d2 H13 mm | d2 inches | d3 mm | d3 inches | d7 mm | d7 inches |
|---|---|---|---|---|---|---|
| 10SL | 3.2 | .126 | 6.5 | .256 | 6 | .248 |
| 14S | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 16S | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 16 | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 18 | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 20 | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 22 | 3.2 | .126 | 6.5 | .256 | 6.3 | .248 |
| 24 | 3.7 | .146 | 7.5 | .295 | 7.5 | .295 |
| 28 (90deg.) | 3.7 | .146 | 7.5 | .295 | n/a | n/a |
| 28 (82deg.) | 4.2 | .165 | n/a | n/a | 7.3 | .287 |
| 32 | 4.3 | .169 | 8 | .315 | 8.6 | .339 |
| 36 | 4.3 | .169 | 8.5 | .335 | 8.6 | .339 |
| 40 | 4.3 | .169 | 8.5 | .335 | 8.6 | .339 |

Receptacle Identification • CIR00/CIR020 • Chamfered Holes

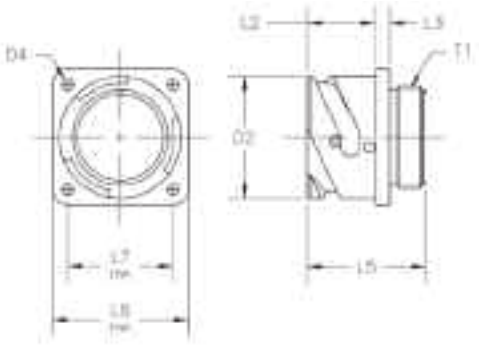
| For use with metric screws (d3) Countersunk mounting holes | For use with UN screws (d7) Countersunk mounting holes |
|---|---|
| CIR 00AFS | CIR 00AFSM |
| CIR 00CFFS | CIR 00CFFSM |
| CIR 00CFZFS | CIR 00CFZFSM |
| CIR 00FFS | CIR 00FFSM |
| CIR 00GFS | CIR 00GFSM |
| CIR 00G2FS | CIR 00G2FSM |
| CIR 00LCFFS | CIR 00LCFFSM |
| CIR 00LCFZFS | CIR 00LCFZFSM |
| CIR 00LFFS | CIR 00LFFSM |
| CIR 00RFS | CIR 00RFSM |
| CIR 00LRFS | CIR 00LRFSM |
| CIR 00RVFS | CIR 00RVFSM |
| CIR 00SBFS | CIR 00SBFSM |
| CIR 020RFS | CIR 020RFSM |
| CIR 020YMFS | CIR 020YMFSM |

Specifications and dimensions subject to change
Dimensions shown in mm.

## CIR020R/00 Front Mount, Square Flange Receptacle

| Shell Size | D2 Maximum mm / inch | D4 + 0.1 .004 mm / inch | L2 + 0.4 .016 mm / inch | L3 +/- 0.2 .008 mm / inch | L5 +/- 0.3 .012 mm / inch | L6 +/- 0.3 .012 mm / inch | L7 +/- 0.1 .004 mm / inch | T1 Thread |
|---|---|---|---|---|---|---|---|---|
| 10SL | 18.2 .72 | 3.2 .126 | 14.2 .559 | 2.8 .110 | 24.7 .972 | 25.4 1.00 | 18.2 .717 | 5/8-24UNEF |
| 14S | 24.6 .97 | 3.2 .126 | 14.2 .559 | 3.2 .126 | 24.7 .972 | 30.0 1.181 | 23.0 .906 | 3/4-20UNEF |
| 16S | 27.4 1.08 | 3.2 .126 | 14.2 .559 | 3.2 .126 | 24.7 .972 | 32.5 1.280 | 24.6 .969 | 7/8-20UNEF |
| 16 | 27.4 1.08 | 3.2 .126 | 19.0 .748 | 3.2 .126 | 33.8 1.331 | 32.5 1.280 | 24.6 .969 | 7/8-20UNEF |
| 18 | 30.8 1.21 | 3.2 .126 | 19.0 .748 | 4.0 .157 | 33.8 1.331 | 35.0 1.378 | 27.0 1.063 | 1.00-20UNEF |
| 20 | 34.2 1.35 | 3.2 .126 | 19.0 .748 | 4.0 .157 | 33.8 1.331 | 38.0 1.496 | 29.4 1.157 | 1 1/8-18UNEF |
| 22 | 37.4 1.47 | 3.2 .126 | 19.0 .748 | 4.0 .157 | 33.8 1.331 | 41.0 1.614 | 31.8 1.252 | 1 1/4-18UNEF |
| 24 | 40.9 1.61 | 3.7 .146 | 20.6 .811 | 4.0 .157 | 35.7 1.406 | 44.5 1.752 | 34.9 1.374 | 1 3/8-18UNEF |
| 28 | 46.7 1.84 | 3.7 .146 | 20.6 .811 | 4.0 .157 | 35.7 1.406 | 50.8 2.000 | 39.7 1.563 | 1 5/8-18UNEF |
| 32 | 53.4 2.10 | 4.3 .169 | 22.2 .874 | 4.0 .157 | 37.3 1.469 | 57.0 2.244 | 44.5 1.752 | 1 7/8-16UN |
| 36 | 59.6 2.35 | 4.3 .169 | 22.2 .874 | 4.0 .157 | 37.3 1.469 | 63.5 2.500 | 49.2 1.937 | 2 1/16-16UN |
| 40 | 65.5 2.58 | 4.3 .169 | 22.2 .874 | 4.0 .157 | 37.3 1.469 | 69.9 2.752 | 55.5 2.185 | 2 5/16-16UNS |

CIR020R/00



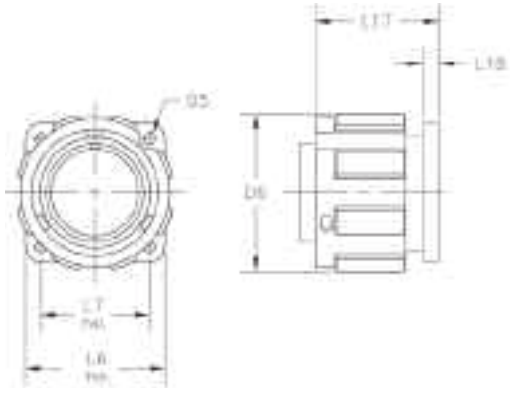
Threaded (rear) to accept accessory hardware. Environment proof when mounted with proper panel sealing gasket.

CIR05 - XX Dummy receptacle same as CIR020R/00 without rear threads. Consult Customer Service Department for part numbers.

## CIR064PP Panel Plug

| Shell Size | D5 + 0.1 .004 mm / inch | D6 Max. mm / inch | L6 +/- 0.4 .016 mm / inch | L7 +/- 0.1 .004 mm / inch | L17 +/- 0.4 .016 mm / inch | L18 +/- 0.2 .008 mm / inch |
|---|---|---|---|---|---|---|
| 10SL | 3.2 .126 | 22.8 .90 | 25.4 1.000 | 18.2 .717 | 28.6 1.126 | 3.2 .126 |
| 14S | 3.2 .126 | 31.7 1.25 | 30.0 1.181 | 23.0 .906 | 30.1 1.185 | 3.2 .126 |
| 16S | 3.2 .126 | 35.9 1.41 | 32.5 1.280 | 24.6 .969 | 30.1 1.185 | 3.2 .126 |
| 16 | 3.2 .126 | 35.9 1.41 | 32.5 1.280 | 24.6 .969 | 37.5 1.476 | 4.0 .157 |
| 18 | 3.2 .126 | 39.5 1.56 | 35.0 1.378 | 27.0 1.063 | 37.5 1.476 | 4.0 .157 |
| 20 | 3.2 .126 | 42.9 1.69 | 38.0 1.496 | 29.4 1.157 | 37.7 1.484 | 4.4 .173 |
| 22 | 3.2 .126 | 46.1 1.81 | 41.0 1.614 | 31.8 1.252 | 37.3 1.469 | 4.4 .173 |
| 24 | 3.7 .146 | 49.5 1.95 | 44.5 1.752 | 34.9 1.374 | 39.0 1.535 | 4.8 .189 |
| 28 | 3.7 .146 | 56.9 2.24 | 50.8 2.000 | 39.7 1.563 | 39.0 1.535 | 4.8 .189 |
| 32 | 4.3 .169 | 63.7 2.51 | 57.0 2.244 | 44.5 1.752 | 40.5 1.594 | 4.8 .189 |
| 36 | 4.3 .169 | 70.1 2.76 | 63.5 2.500 | 49.2 1.937 | 42.1 1.657 | 6.4 .252 |
| 40 | 5.2 .205 | 75.7 2.98 | 69.9 2.752 | 55.5 2.185 | 44.5 1.752 | 6.4 .252 |

CIR064PP

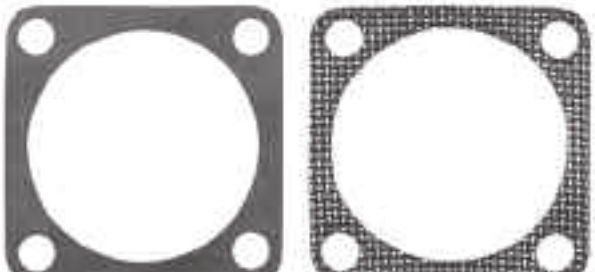


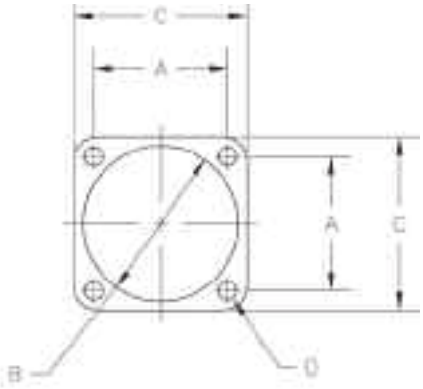
Square flange mounting with four through holes. Environment proof with proper sealing gasket.

Type FR- Flame retardant: 55 shore. *Consult Factory*
Type N - Neoprene: 80 shore. *Consult Factory*
Type S - Silicone: 75 shore. *Consult Factory*
Type NS - Silicone Black Conductive. *Consult Factory*
Thickness - 0.5 ±0.2

Type F - Viton*: 80 shore. *Consult Factory*
Thickness - 0.8 ± 0.2 mm

Type SC - Silicone, black, conductive,
nickel graphite filler.
Tin plated for RFI shielding.
Thickness - 0.5 ± 0.2 mm.






Operating Temperature

-55° C. to 125° C. - Neoprene
-55° C. to 200° C. - Silicone
-25° C. to 200° C. - Viton*
-40° C. to 125° C. - Flame Retardant.

| Size | A +/- 0.2 mm | .008 inch | B rear mount + 0.4 mm | .016 inch | B front mount + 0.4 mm | .016 inch | C +/- 0.5 mm | .020 inch | D + +0.5 mm | .040 inch |
|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | 18.2 | .716 | 18.2 | .716 | 15.7 | .625 | 25.4 | 1.000 | 4.2 | .165 |
| 14S | 23.0 | .905 | 24.6 | .968 | 22.1 | .874 | 30.0 | 1.181 | 4.2 | .165 |
| 16S | 24.6 | .968 | 27.4 | 1.079 | 25.3 | 1.000 | 32.5 | 1.279 | 4.2 | .165 |
| 16 | 24.6 | .968 | 27.4 | 1.079 | 25.3 | 1.000 | 32.5 | 1.279 | 4.2 | .165 |
| 18 | 27.0 | 1.063 | 30.8 | 1.212 | 28.4 | 1.126 | 35.0 | 1.378 | 4.2 | .165 |
| 20 | 29.4 | 1.157 | 34.2 | 1.346 | 31.6 | 1.248 | 38.0 | 1.496 | 4.2 | .165 |
| 22 | 31.8 | 1.252 | 37.4 | 1.472 | 34.8 | 1.374 | 41.0 | 1.614 | 4.2 | .165 |
| 24 | 34.9 | 1.374 | 40.9 | 1.610 | 38 | 1.500 | 44.5 | 1.752 | 4.2 | .165 |
| 28 | 39.7 | 1.563 | 46.7 | 1.838 | 44.3 | 1.750 | 50.8 | 2.000 | 5.2 | .204 |
| 32 | 44.5 | 1.752 | 53.4 | 2.102 | 50.7 | 1.996 | 57.0 | 2.244 | 5.2 | .204 |
| 36 | 49.2 | 1.937 | 59.6 | 2.346 | 57 | 2.188 | 63.5 | 2.500 | 5.2 | .204 |
| 40 | 55.6 | 2.189 | 65.7 | 2.586 | 61.9 | 2.437 | 69.9 | 2.752 | 5.2 | .204 |

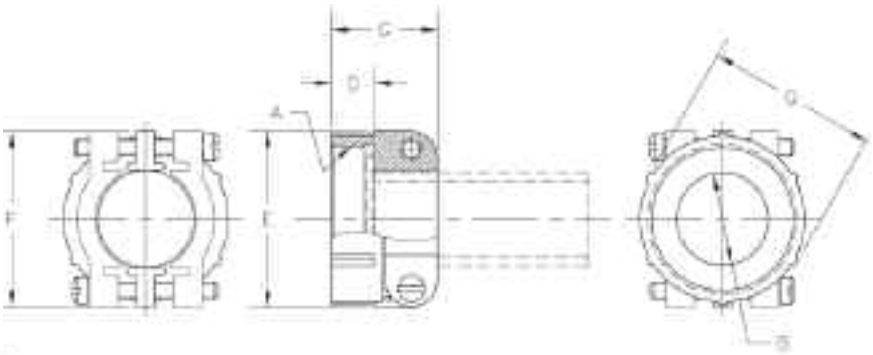
* Trademark-Dupont

| | REAR PANEL MOUNT 030 | | | | | | FRONT PANEL MOUNT CIR00 CIR020 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shell Size | Type N | Type NS | Type SC | Type S | Type F | Type FR | Type N | Type NS | Type SC | Type S | Type F | Type FR |
| 10SL | 46739-10 | 46739-10/1 | 46739-10/2C | 46739-10/2 | 46739-10/3 | 46739-10/FR | 16950 | 16950/1 | 16950/2C | 16950/2 | 16950/3 | 16950/FR |
| 14S | 46739-14 | 46739-14/1 | 46739-14/2C | 46739-14/2 | 46739-14/3 | 46739-14/FR | 16952 | 16952/1 | 16952/2C | 16952/2 | 16952/3 | 16952/FR |
| 16S | 46739-16 | 46739-16/1 | 46739-16/2C | 46739-16/2 | 46739-16/3 | 46739-16/FR | 16953 | 16953/1 | 16953/2C | 16953/2 | 16953/3 | 16953/FR |
| 16 | 46739-16 | 46739-16/1 | 46739-16/2C | 46739-16/2 | 46739-16/3 | 46739-16/FR | 16953 | 16953/1 | 16953/2C | 16953/2 | 16953/3 | 16953/FR |
| 18 | 46739-18 | 46739-18/1 | 46739-18/2C | 46739-18/2 | 46739-18/3 | 46739-18/FR | 16954 | 16954/1 | 16954/2C | 16954/2 | 16954/3 | 16954/FR |
| 20 | 46739-20 | 46739-20/1 | 46739-20/2C | 46739-20/2 | 46739-20/3 | 46739-20/FR | 16955 | 16955/1 | 16955/2C | 16955/2 | 16955/3 | 16955/FR |
| 22 | 46739-22 | 46739-22/1 | 46739-22/2C | 46739-22/2 | 46739-22/3 | 46739-22/FR | 16956 | 16956/1 | 16956/2C | 16956/2 | 16956/3 | 16956/FR |
| 24 | 46739-24 | 46739-24/1 | 46739-24/2C | 46739-24/2 | 46739-24/3 | 46739-24/FR | 16957 | 16957/1 | 16957/2C | 16957/2 | 16957/3 | 16957/FR |
| 28 | 46739-28 | 46739-28/1 | 46739-28/2C | 46739-28/2 | 46739-28/3 | 46739-28/FR | 16958 | 16958/1 | 16958/2C | 16958/2 | 16958/3 | 16958/FR |
| 32 | 46739-32 | 46739-32/1 | 46739-32/2C | 46739-32/2 | 46739-32/3 | 46739-32/FR | 16959 | 16959/1 | 16959/2C | 16959/2 | 16959/3 | 16959/FR |
| 36 | 46739-36 | 46739-36/1 | 46739-36/2C | 46739-36/2 | 46739-36/3 | 46739-36/FR | 16960 | 16960/1 | 16960/2C | 16960/2 | 16960/3 | 16960/FR |
| 40 | 46739-40 | 46739-40/1 | 46739-40/2C | 46739-40/2 | 46739-40/3 | 46739-40/FR | 16968 | 16968/1 | 16968/2C | 16968/2 | 16968/3 | 16968/FR |

Specifications and dimensions subject to change
Dimensions shown in mm.

## Cable Clamp
## MS 3057-XXA

Concentric cable clamps. They insure strain relief and central location of the cable. Can be used with bushing MS 3420.



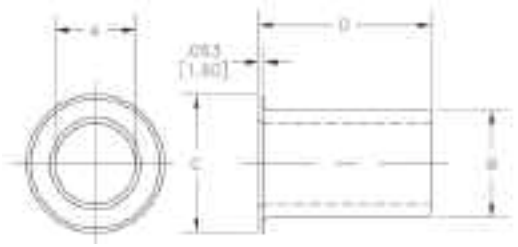
"A" Style Clamp With Bushing

MS 3057-XXA

| Shell Size | Clamp Part Number | A thread class 2B (inches) | B dia. mm / inch | D mm / inch | G mm / inch | E-F-Q mm / inch | Used With Bushing Part Number |
|---|---|---|---|---|---|---|---|
| 10SL | MS3057-4A | .625-24UNEF | 8.0 .32 | 10.5 .41 | 20.6 .81 | 22.0 .87 | MS3420-4 |
| 14S | MS3057-6A | .750-20UNEF | 11.0 .43 | 10.5 .41 | 22.2 .87 | 27.0 1.06 | MS3420-6 |
| 16S & 16 | MS3057-8A | .875-20UNEF | 14.2 .56 | 10.5 .41 | 24.0 .95 | 28.0 1.10 | MS3420-8 |
| 18 | MS3057-10A | 1.000-20UNEF | 15.8 .62 | 10.5 .41 | 28.5 1.12 | 33.0 1.30 | MS3420-10 |
| 20 & 22 | MS3057-12A | 1.187-18UNEF | 19.0 .75 | 10.5 .41 | 24.0 .95 | 35.0 1.38 | MS3420-12 |
| 24 & 28 | MS3057-16A | 1.437-18UNEF | 23.8 .94 | 10.5 .41 | 26.0 1.02 | 43.0 1.69 | MS3420-16 |
| 32 | MS3057-20A | 1.750-18UNS | 31.7 1.25 | 12.5 .49 | 28.0 1.10 | 51.0 2.01 | MS3420-20 |
| 36 | MS3057-24A | 2.000-18UNS | 35.0 1.38 | 14.0 .55 | 29.4 1.16 | 58.0 2.28 | MS3420-24 |
| 40 | MS3057-28A | 2.250-16UN | 41.2 1.62 | 14.0 .55 | 42.8 1.68 | 65.0 2.56 | MS3420-28 |

## Bushing
## MS 3420 - XX

Bushing of synthetic rubber to be used with cable clamps MS 3057 A for protection of the cable or wires. These bushings can be telescoped for smaller cable diameters.



Bushing

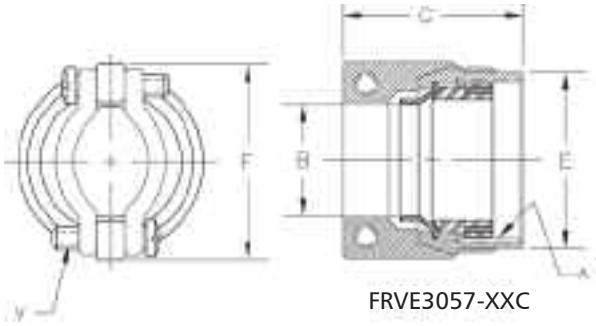
MS 3420-XX

| Bushing Part Number | Used With Cable Clamp | A dia. | B dia. | C dia. | D |
|---|---|---|---|---|---|
| MS3420-4 | MS3057-4A | 5.58 .220 | 7.7 .30 | 12.8 .50 | 69.8 2.75 |
| MS3420-6 | MS3057-6A | 7.92 .312 | 10.8 .43 | 15.7 .62 | 66.8 2.63 |
| MS3420-8 | MS3057-8A | 11.09 .437 | 14.0 .55 | 18.8 .74 | 63.5 2.50 |
| MS3420-10 | MS3057-10A | 14.27 .562 | 15.6 .61 | 22.6 .89 | 60.3 2.37 |
| MS3420-12 | MS3057-12A | 15.87 .625 | 18.8 .74 | 27.5 1.08 | 57.1 2.25 |
| MS3420-16 | MS3057-16A | 19.05 .750 | 23.5 .93 | 33.3 1.31 | 53.9 2.12 |
| MS3420-20 | MS3057-20A | 23.79 .937 | 31.5 1.24 | 40.5 1.59 | 50.8 2.00 |
| MS3420-24 | MS3057-24A | 31.75 1.250 | 34.7 1.37 | 46.9 1.85 | 47.6 1.87 |
| MS3420-28 | MS3057-28A | 34.92 1.374 | 41.0 1.61 | 52.9 2.08 | 44.4 1.75 |

Waterproof clamp for jacketed cables. Provides mechanical strain relief plus concentric clamping over a wide range of cable sizes.

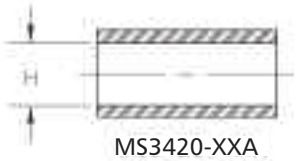
A rubber gland seal ensures a waterproof seal on the cable jacket.

Note: Other materials available.




FRVE3057-XXC

| Shell Size | Clamp Part Number | A thread class 2B (inches) | B (Approx.) open mm / inch | B (Approx.) closed mm / inch | E +/- 0.4 mm | E +/- .016 inch | F +/- 0.2 mm | F +/- .008 inch | G + 0.5 mm | G + .020 inch | V thread class 2A (inches) | Bushing Part Number | H open mm | H open inch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10SL | FRVE3057-4C | .625-24UNEF | 7.93 | 2.38 | 19.0 | .748 | 22.6 | .890 | 32.3 | 1.272 | 6-32UNC | MS3420-4A | 5.56 | .219 |
| | | | .312 | .094 | | | | | | | | | | |
| 14S | FRVE3057-6C | .750-20UNEF | 11.13 | 6.35 | 25.8 | 1.016 | 25.8 | 1.016 | 32.3 | 1.272 | 6-32UNC | MS3420-6A | 7.93 | .312 |
| | | | .438 | .25 | | | | | | | | MS3420-4A | 5.56 | .219 |
| 16S&16 | FRVE3057-8C | .875-20UNEF | 13.48 | 8 | 25.4 | 1.000 | 28.1 | 1.106 | 32.3 | 1.106 | 6-32UNC | MS3420-8A | 11.10 | .437 |
| | | | .531 | .315 | | | | | | | | MS3420-6A | 7.93 | .312 |
| 18 | FRVE3057-10C | 1.000-20UNEF | 15.87 | 9.6 | 28.5 | 1.122 | 31 | 1.220 | 35.3 | 1.390 | 6-32UNC | MS3420-10A | 11.10 | .437 |
| | | | .625 | .375 | | | | | | | | MS3420-6A | 7.93 | .312 |
| 20&22 | FRVE3057-12C | 1.187-18UNEF | 19 | 11.3 | 33.3 | 1.311 | 37.3 | 1.468 | 35.7 | 1.405 | 8-32UNC | MS3420-12A | 13.74 | .541 |
| | | | .748 | .445 | | | | | | | | MS3420-8A | 11.10 | .437 |
| 24&28 | FRVE3057-16C | 1.437-18UNEF | 23.8 | 15.5 | 39.6 | 1.559 | 42.0 | 1.653 | 38.5 | 1.516 | 8-32UNC | MS3420-16A | 19.00 | .748 |
| | | | .938 | .610 | | | | | | | | MS3420-12A | 13.74 | .541 |
| | | | | | | | | | | | | MS3420-8A | 11.10 | .437 |
| 32 | FRVE3057-20C | 1.750-18UNS | 31.75 | 23.4 | 47.6 | 1.874 | 54.0 | 2.126 | 44.8 | 1.764 | .250-20UNC | MS3420-20A | 23.80 | .937 |
| | | | 1.250 | .921 | | | | | | | | MS3420-16A | 19.00 | .748 |
| | | | | | | | | | | | | MS3420-12A | 13.74 | .541 |
| 36 | FRVE3057-24C | 2.000-18UNS | 35 | 23.4 | 53.9 | 2.122 | 57.1 | 2.248 | 51.6 | 2.031 | .250-20UNC | MS3420-24A | 28.5 | 1.122 |
| | | | 1.378 | 9.21 | | | | | | | | MS3420-20A | 23.80 | .937 |
| | | | | | | | | | | | | MS3420-16A | 19.00 | .748 |
| 40 | FRVE3057-28C | 2.250-16UN | 41.25 | 29.9 | 60.3 | 2.374 | 63.5 | 2.500 | 51.6 | 2.031 | .250-20UNC | MS3420-28A | 31.75 | 1.25 |
| | | | 1.625 | 1.177 | | | | | | | | MS3420-20A | 23.80 | .937 |
| | | | | | | | | | | | | MS3420-16A | 19.00 | .748 |
| 44 | FRVE3057-32C | 2.500-16UN | 47.63 | 34.9 | 66.6 | 2.622 | 71.4 | 2.811 | 55.6 | 2.189 | .250-20UNC | MS3420-32A | 41.27 | 1.625 |
| | | | 1.875 | 1.374 | | | | | | | | MS3420-28A | 31.75 | 1.250 |




MS3420-XXA

"C" Style Clamp With Gland

Cable Clamp FRVE-3057-XXC

For "C" Style Clamp Bushing

Bushing MS3420-XXA

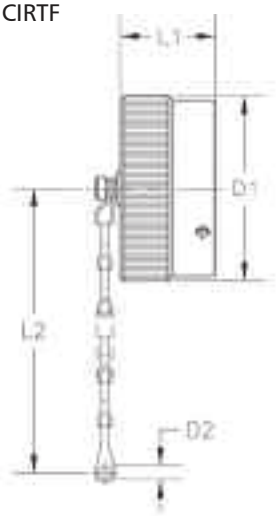
Specifications and dimensions subject to change
Dimensions shown in mm.

## CIRTF

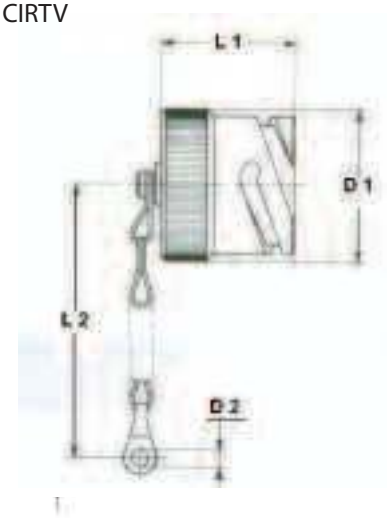
## CIRTV

Protective metal caps which seal the front of plugs or receptacles. Include a chain for retention of the cap at the required location. Other methods of attachment are available.

CIRTF




CIRTV




TF Caps (for receptacles CIR00, 01, 020, 030, 05, 070, 1B)

| VEAM Part Number | D1 Maximum mm /inch | D2 mm+0.5 inch+.020 mm-0.25 inch -.010 | L1 Maximum | L2 Approximate mm /inch |
|---|---|---|---|---|
| CIR10SLTF | 23.5 .93 | 4.4 .173 | 16.5 .65 | 127.0 5.00 |
| CIR14STF | 30.5 1.20 | 4.4 .173 | 16.5 .65 | 127.0 5.00 |
| CIR16STF | 33.0 1.30 | 4.4 .173 | 16.5 .65 | 127.0 5.00 |
| CIR16TF | 33.0 1.30 | 4.4 .173 | 21.0 .83 | 127.0 5.00 |
| CIR18TF | 37.5 1.48 | 4.4 .173 | 21.0 .83 | 127.0 5.00 |
| CIR20TF | 41.0 1.61 | 4.4 .173 | 21.0 .83 | 127.0 5.00 |
| CIR22TF | 44.0 1.73 | 4.4 .173 | 21.0 .83 | 127.0 5.00 |
| CIR24TF | 47.5 1.87 | 4.4 .173 | 21.0 .83 | 127.0 5.00 |
| CIR28TF | 54.5 2.15 | 5.6 .220 | 21.0 .83 | 190.0 7.48 |
| CIR32TF | 61.0 2.40 | 5.6 .220 | 21.0 .83 | 190.0 7.48 |
| CIR36TF | 67.5 2.66 | 5.6 .220 | 21.0 .83 | 175.0 6.89 |
| CIR40TF | 73.0 2.87 | 5.6 .220 | 21.0 .83 | 190.0 7.48 |

TV Caps (for plugs CIR06, 08)

| VEAM Part Number | D1 Maximum mm / inch | D2 mm+0.5 inch+.020 mm-0.25 inch -.010 | L1 Maximum mm / inch | L2 Approximate mm / inch |
|---|---|---|---|---|
| CIR10SLTV | 21.0 .83 | 4.4 .173 | 24.0 .94 | 127.0 5.0 |
| CIR14STV | 27.5 1.08 | 4.4 .173 | 24.0 .94 | 127.0 5.0 |
| CIR16STV | 30.0 1.18 | 4.4 .173 | 24.0 .94 | 127.0 5.0 |
| CIR16TV | 30.0 1.18 | 4.4 .173 | 32.0 1.26 | 127.0 5.0 |
| CIR18TV | 33.5 1.32 | 4.4 .173 | 32.0 1.26 | 127.0 5.0 |
| CIR20TV | 37.0 1.45 | 4.8 .189 | 32.0 1.26 | 140.0 5.5 |
| CIR22TV | 40.0 1.57 | 4.8 .189 | 32.0 1.26 | 140.0 5.5 |
| CIR24TV | 43.5 1.71 | 4.8 .189 | 32.0 1.26 | 140.0 5.5 |
| CIR28TV | 49.5 1.95 | 4.8 .189 | 32.0 1.26 | 190.0 7.5 |
| CIR32TV | 56.0 2.20 | 5.6 .220 | 32.0 1.26 | 190.0 7.5 |
| CIR36TV | 62.5 2.46 | 5.6 .220 | 32.0 1.26 | 190.0 7.5 |
| CIR40TV | 67.7 2.66 | 5.6 .220 | 32.0 1.26 | 190.0 7.5 |

# Protective Plastic Caps

Protective vinyl caps are available upon request to guard against entry of moisture, dirt and other foreign matter to the contact area during shipment.

| Shell Size | For Receptacles CIR 00, 01, 020, 030, 070, TB | For Plugs CIR 06, 08 | For Plugs CIR 06GG, 08GG | For Plugs CIR 065 | For Plugs CIR 064 |
|---|---|---|---|---|---|
| | Part Number | Part Number | Part Number | Part Number | Part Number |
| 10SL | #27 | #35 | #45 | #35 | #35 |
| 14S | #41 | #42 | #51 | #51 | #45 |
| 16S | #42 | #45 | #55 | #51 | #48 |
| 16 | #42 | #45 | #55 | #51 | #48 |
| 18 | #45 | #51 | #57 | #53 | #53 |
| 20 | #51 | #55 | #57 | #56 | #56 |
| 22 | #53 | #56 | #65 | #57 | #57 |
| 24 | #56 | #57 | #65 | #58 | #58 |
| 28 | #58 | #65 | #71 | #66 | #66 |
| 32 | #66 | #71 | #76 | #76 | #75 |
| 36 | #71 | #76 | #81 | #78 | #78 |
| 40 | #76 | #81 | #82 | #81 | #81 |

| Contact Size | Wire Size (AWG) | VEAM Contact Number | Insertion Tool | Removal Tool Kit | Removal Tool Kit Replacement Parts Handle | Tips | Guide Pins |
|---|---|---|---|---|---|---|---|
| 20P | 20 | 46730-20P | T98143 | 11-7576-101 | 0148B | 46592M-VPT | --- |
| 20S | 20 | 46731 | T98143 | 11-7576-101 | 0148B | 46592M-101S | 27977-20T50 |
| 18P | 18 | 46740P | T98143 | 11-7576-37 | 0148B | 46592M-37PT50 | --- |
| 18S | 18 | 46740S | T98143 | 11-7576-37 | 0148B | 46592M-37ST50 | 27977-20T50 |
| 18P | 20-22 | 46740-15P | T98143 | 11-7576-37 | 0148B | 46592M-37PT50 | --- |
| 18S | 20-22 | 46740-15S | T98143 | 11-7576-37 | 0148B | 46592M-37ST50 | 27977-20T50 |
| 18P | 16 | 46740-22P | 11-7345 | 11-7576-37 | 0148B | 46592M-37PT50 | --- |
| 18S | 16 | 46740-22S | 11-7345 | 11-7576-37 | 0148B | 46592M-37ST50 | 27977-20T50 |
| 16S P | 16 | 27911 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S S | 16 | 27961 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16S P | 20-24 | 27911-13 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S S | 20-24 | 27961-13 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16S P | 20 | 27911-15 | T98143 | A43240 | 0148B | 2-3697 | --- |
| 16S S | 20 | 27961-15 | T98143 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16S P | 14-16 | 27911-20 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S S | 14-16 | 27961-20 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16S P | 12-14 | 27911-26 | 46736 | A43240 | 0148B | 2-3697 | --- |
| 16S S | 12-14 | 27961-26 | 46736 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 16 | 27913 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S | 16 | 27963 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 24-26 | 27913-08 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S | 24-26 | 27963-08 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 20-22 | 27913-12 | T98143 | A43240 | 0148B | 2-3697 | --- |
| 16S | 20-22 | 27963-12 | T98143 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 20-22 | 27913-13 | T98143 | A43240 | 0148B | 2-3697 | --- |
| 16S | 20-22 | 27963-13 | T98143 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 18-20 | 27913-15 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S | 18-20 | 27963-15 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 14-16 | 27913-20 | 11-7345 | A43240 | 0148B | 2-3697 | --- |
| 16S | 14-16 | 27963-20 | 11-7345 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 16P | 12-14 | 27913-26 | 46736 | A43240 | 0148B | 2-3697 | --- |
| 16S | 12-14 | 27963-26 | 46736 | A43240 | 0148B | 2-3698 | 27977-16T50 |
| 12P | 8 | 27914-8 | 46736-6 | A43240 | 0148B | 2-3696 | --- |
| 12S | 8 | 27964-8 | 46736-6 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 20-24 | 27914-12 | 46736 | A43240 | 0148B | 2-3696 | --- |
| 12S | 20-24 | 27964-12 | 46736 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 14-18 | 27914-20 | 46736 | A43240 | 0148B | 2-3696 | --- |
| 12S | 14-18 | 27964-20 | 46736 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 2.5mm | 27914-22 | 46736 | A43240 | 0148B | 2-3696 | --- |
| 12S | 2.5mm | 27964-22 | 46736 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 12 | 27914-26 | 46736 | A43240 | 0148B | 2-3696 | --- |
| 12S | 12 | 27964-26 | 46736 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 4 mm sq. | 27914-30 | 46736 | A43240 | 0148B | 2-3696 | --- |
| 12S | 4 mm sq. | 27964-30 | 46736 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 12P | 10 | 27914-38 | 46736-6 | A43240 | 0148B | 2-3696 | --- |
| 12S | 10 | 27964-38 | 46736-6 | A43240 | 0148B | 2-3698 | 27977-12T50 |
| 8P | 8 | 27915 | A46151-8T50 | A43240-8 | 0148B | 2-8252 | Not Required |
| 8S | 8 | 27935 | A46151-8T50 | A43240-8 | 0148B | 2-8251 | Not Required |
| 8P | 12-14 | 27915-26-62 | A46151-8T50 | A43240-8 | 0148B | 2-8252 | Not Required |
| 8S | 12-14 | 27935-26-62 | A46151-8T50 | A43240-8 | 0148B | 2-8251 | Not Required |
| 8P | 12-14 | 27915-26 | A46151-8T50 | A43240-8 | 0148B | 2-8252 | Not Required |
| 8S | 12-14 | 27935-26 | A46151-8T50 | A43240-8 | 0148B | 2-8251 | Not Required |
| 8P | 4 mm sq. | 27915-30 | A46151-8T50 | A43240-8 | 0148B | 2-8252 | Not Required |
| 8S | 4 mm sq. | 27935-30 | A46151-8T50 | A43240-8 | 0148B | 2-8251 | Not Required |

Insertion Tools

Guide Pins

A43240
Removal Kit

Assembly manual available upon request.

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

Insertion Tools

Guide Pins

A43240
Removal Kit

| Contact Size | Wire Size (AWG) | VEAM Contact Number | Insertion Tool | Removal Tool Kit | Removal Tool Kit Replacement Parts Handle | Tips | Guide Pins |
|---|---|---|---|---|---|---|---|
| 8P | 10 | 27915-38 | A46151-8T50 | A43240-8 | 0148B-8 | 2-8252 | Not Required |
| 8S | 10 | 27935-38 | A46151-8T50 | A43240-8 | 0148B-8 | 2-8251 | Not Required |
| 8P | 6 | 27915-58 | A46151-8T50 | A43240-8 | 0148B-8 | 2-8252 | Not Required |
| 8S | 6 | 27935-58 | A46151-8T50 | A43240-8 | 0148B-8 | 2-8251 | Not Required |
| 4P | 4-6 | 27916 | A46151-4T50* | 46150-4 | 46150 | 11-7370-4 | Not Required |
| 4S | 4-6 | 27936 | A46151-4T50* | 46150-4 | 46150 | 11-7674-2 | Not Required |
| 4P | 2.5mm sq. | 27916-22 | A46151-4T50* | 46150-4 | 46150 | 11-7370-4 | Not Required |
| 4S | 2.5mm sq. | 27936-22 | A46151-4T50* | 46150-4 | 46150 | 11-7674-2 | Not Required |
| 4P | 16mm sq. | 27916-62 | A46151-4T50* | 46150-4 | 46150 | 11-7370-4 | Not Required |
| 4S | 16mm sq. | 27936-62 | A46151-4T50* | 46150-4 | 46150 | 11-7674-2 | Not Required |
| 0P | 0 | 27917V | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 0 | 27937V | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 8 | 27917-45 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 8 | 27937-45 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 10mm sq. | 27917-50 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 10mm sq. | 27937-50 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 16mm sq. | 27917-62 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 16mm sq. | 27937-62 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 25mm sq. | 27917-78 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 25mm sq. | 27937-78 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 35mm sq. | 27917-90 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 35mm sq. | 27937-90 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 50mm sq. | 27917-107 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 50mm sq. | 27937-107 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 0P | 4 | 46646-0 | A46151-0T50* | 46150-0 | 46150 | 11-7370-5 | Not Required |
| 0S | 4 | 47647-0 | A46151-0T50* | 46150-0 | 46150 | 11-7674-3 | Not Required |
| 4/0 P | 2 | 47107-90 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 2 | 47114-90 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 P | 0 (1/0) | 47107-115 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 0 (1/0) | 47114-115 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 P | 2/0 | 47107-135 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 2/0 | 47114-135 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 P | 70mm sq. | 47107-144 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 70mm sq. | 47114-144 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 P | 95mm sq. | 47107-155 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 95mm sq. | 47114-155 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 P | 4/0 | 47107-165 | Not Required | Not Required | Not Required | Not Required | Not Required |
| 4/0 S | 4/0 | 47114-165 | Not Required | Not Required | Not Required | Not Required | Not Required |

*For solder contacts use TIP P/N SD46151-4T50 and SD46151-0T50.

Assembly manual available upon request.

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

## TENSILE STRENGTH AND MILLIVOLT DROP MEASUREMENTS MEET THE REQUIREMENTS OF MIL- C-39029, MIL-C-22520, MIL-T-7928 AS APPLICABLE.

### Pneumatic Power Crimping Tool
### Model 400B HD

This lightweight (16 lbs.) crimping tool will crimp pin and socket contacts as well as solderless terminals. Non-adjustable dies are available to accommodate wires ranging from 16AWG through 4AWG.The four-indent crimp jaws provide a perfect gas tight crimp every time, maximizing wire-contact pull-out forces. Locators are available for every CIR series contact.

The Model 400B HD Power Crimp Tool is excellent for high production runs of small gauge contacts.

Operating Air pressure: 100-120 PS Size: 4" O.D. x 12 3/4" Long
Bench mounting version is standard. Foot pedal # 104 available.
For large contacts and terminals use our Model 500D Tool.

This tool is available from Pico Corporation
Phone: (805) 388-5510
Fax: (805) 482-4038

### Pneumatic Power Crimping Tool
### Model 500D

This power crimping tool will handle pin and socket contacts plus lug terminals (insulated or non-insulated) in all sizes ranging from 8AWG to 250 MCM.
Bench mounting version is standard. Foot pedal #105 available.

Consult our factory for foot pedal accessories.

Shipping weight: 45 lbs. approximate.

Operating Air pressure: 100-120 PSI.

This tool is available from Pico Corporation
Phone: (805) 388-5510
Fax: (805) 482-4038

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

Turret

AF8 Manual CrimpTool

| Contact Size | Wire Size AWG | VEAM Contact Number | AF8 Hand Tool | Model 400 BHD Pneumatic | | Model 500 D Pneumatic | |
|---|---|---|---|---|---|---|---|
| | | | Turret | Die Part Number | Locator Part Number | Die Part Number | Locator Part Number |
| 20P | 20 | 46730-20P | 616266 | --- | --- | --- | --- |
| 20S | 20 | 46731 | 616266 | --- | --- | --- | --- |
| 18P | 18 | 46740P | TH485 | --- | --- | --- | --- |
| 18S | 18 | 46740S | TH485 | --- | --- | --- | --- |
| 18P | 20-22 | 46740-15P | TH485 | --- | --- | --- | --- |
| 18S | 20-22 | 46740-15S | TH485 | --- | --- | --- | --- |
| 18P | 16 | 46740-22P | TH485 | --- | --- | --- | --- |
| 18S | 16 | 46740-22S | TH485 | --- | --- | --- | --- |
| 16S P | 16 | 27911 | 616266 | 414DA-16N | 4314-2 | --- | --- |
| 16S S | 16 | 27961 | 616266 | 414DA-16N | 4314-1 | --- | --- |
| 16S P | 20-24 | 27911-13 | 616266 | --- | --- | --- | --- |
| 16S S | 20-24 | 27961-13 | 616266 | --- | --- | --- | --- |
| 16S P | 20 | 27911-15 | 616266 | 414DA-16N | 4314-2 | --- | --- |
| 16S S | 20 | 27961-15 | 616266 | 414DA-16N | 4314-1 | --- | --- |
| 16S P | 14-16 | 27911-20 | 616266 | 414DA-12N or 16N | 4314-2 | --- | --- |
| 16S S | 14-16 | 27961-20 | 616266 | 414DA-12N or 16N | 4314-1 | --- | --- |
| 16S P | 12-14 | 27911-26 | 616266 | 414DA-12N | 4314-1 | --- | --- |
| 16S S | 12-14 | 27961-26 | 616266 | 414DA-12N | 4314-2 | --- | --- |
| 16P | 16 | 27913 | 616266 | 414DA-16N | 4332 | --- | --- |
| 16S | 16 | 27963 | 616266 | 414DA-16N | 4333 | --- | --- |
| 16P | 24-26 | 27913-08 | 616266 | --- | --- | --- | --- |
| 16S | 24-26 | 27963-08 | 616266 | --- | --- | --- | --- |
| 16P | 20-22 | 27913-12 | 616266 | --- | --- | --- | --- |
| 16S | 20-22 | 27963-12 | 616266 | --- | --- | --- | --- |
| 16P | 20-24 | 27913-13 | 616266 | --- | --- | --- | --- |
| 16S | 20-24 | 27963-13 | 616266 | --- | --- | --- | --- |
| 16P | 18-20 | 27913-15 | 616266 | 414DA-16N | 4332 | --- | --- |
| 16S | 18-20 | 27963-15 | 616266 | 414DA-16N | 4333 | --- | --- |
| 16P | 14-16 | 27913-20 | 616266 | 414DA-12N or 16N | 4332 | --- | --- |
| 16S | 14-16 | 27963-20 | 616266 | 414DA-12N or 16N | 4333 | --- | --- |
| 16P | 12-14 | 27913-26 | 616266 | 414DA-12N | 4332 | --- | --- |
| 16S | 12-14 | 27963-26 | 616266 | 414DA-12N | 4333 | --- | --- |
| 12P | 8 | 27914-8 | --- | 414DA-8HEX or 8N | 4330M | --- | --- |
| 12S | 8 | 27964-8 | --- | 414DA-8HEX or 8N | 4331M | --- | --- |
| 12P | 20-22 | 27914-12 | 616266 | --- | --- | --- | --- |
| 12S | 20-22 | 27964-12 | 616266 | --- | --- | --- | --- |
| 12P | 14-18 | 27914-20 | 616266 | 414DA-10N | 4330 | --- | --- |
| 12S | 14-18 | 27964-20 | 616266 | 414DA-10N | 4331 | --- | --- |
| 12P | 2.5mm sq. | 27914-22 | 616266 | 414DA-10N | 4330 | --- | --- |
| 12S | 2.5mm sq. | 27964-22 | 616266 | 414DA-10N | 4331 | --- | --- |
| 12P | 12 | 27914-26 | 616266 | 414DA-12N OR 10N | 4330 | --- | --- |
| 12S | 12 | 27964-26 | 616266 | 414DA-12N OR 10N | 4331 | --- | --- |
| 12P | 4mm sq. | 27914-30 | --- | 414DA-10N | 4330 | --- | --- |
| 12S | 4mm sq. | 27964-30 | --- | 414DA-10N | 4331 | --- | --- |
| 12P | 10 | 27914-38 | --- | 414DA-10N | 4330 | --- | --- |
| 12S | 10 | 27964-38 | --- | 414DA-10N | 4331 | --- | --- |
| 8P | 8 | 27915 | --- | 414DA8HEX or 8N | 4329 | 514DA-8 HEX | 5404 |
| 8S | 8 | 27935 | --- | 414DA8HEX or 8N | 4329 | 514DA-8 HEX | 5404 |
| 8P | 12-14 | 27915-26-62 | --- | 414DA-8N | 4329 | 514DA-8 HEX | 5404 |
| 8S | 12-14 | 27935-26-62 | --- | 414DA-8N | 4329 | 514DA-8 HEX | 5404 |
| 8P | 12-14 | 27915-26 | --- | 414DA-10N | 4329 | --- | --- |
| 8S | 12-14 | 27935-26 | --- | 414DA-10N | 4329 | --- | --- |

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

Specifications and dimensions subject to change
Dimensions shown in mm.

| Contact Size | Wire Size AWG | VEAM Contact Number | AF8 Hand Tool | Model 400 BHD Pneumatic | | Pneumatic Model 500 D | |
|---|---|---|---|---|---|---|---|
| | | | Turret | Die Part Number | Locator Part Number | Die Part Number | Locator Part Number |
| 8P | 4mm sq. | 27915-30 | --- | 414DA-10N | 4329 | --- | --- |
| 8S | 4mm sq. | 27935-30 | --- | 414DA-10N | 4329 | --- | --- |
| 8P | 10 | 27915-38 | --- | 414DA-10N | 4329 | --- | --- |
| 8S | 10 | 27935-38 | --- | 414DA-10N | 4329 | --- | --- |
| 8P | 6 | 27915-58 | --- | 414DA-8 HEX | 4329 | 514DA-8 HEX | 5497 |
| 8S | 6 | 27935-58 | --- | 414DA-8 HEX | 4329 | 514DA-8 HEX | 5497 |
| 4P | 4 AWG<br>6 AWG | 27916 | --- | 414DA-4 HEX<br>414DA-8N or 8 HEX | 4043 | 514DA-4 HEX<br>514DA-8N or HEX | 5497 |
| 4S | 4 AWG<br>6 AWG | 27936 | --- | 414DA-4 HEX<br>414DA-8N or 8 HEX | 4043 | 514DA-4 HEX<br>514DA-8N or HEX | 5497 |
| 4P | 2.5mm sq | 27916-22 | --- | 414DA-12N | 4043 | --- | --- |
| 4S | 2.5mm sq | 27936-22 | --- | 414DA-12N | 4043 | --- | --- |
| 4P | 16mm sq. | 27916-62 | --- | 414DA-4 HEX | 4043 | 514DA-4 HEX | 5497 |
| 4S | 16mm sq. | 27936-62 | --- | 414DA-4 HEX | 4043 | 514DA-4 HEX | 5497 |
| 0P | 0 | 27917V | --- | --- | --- | 514DA-0 HEX | 5442 |
| 0S | 0 | 27937V | --- | --- | --- | 514DA-0 HEX | 5441 |
| 0P | 8 | 27917-45 | --- | --- | --- | 514DA-0/8 HEX | 5442 |
| 0S | 8 | 27937-45 | --- | --- | --- | 514DA-0/8 HEX | 5441 |
| 0P | 10mm sq | 27917-50 | --- | --- | --- | 514DA-0/8 HEX | 5442 |
| 0S | 10mm sq | 27937-50 | --- | --- | --- | 514DA-0/8 HEX | 5441 |
| 0P | 16mm sq | 27917-62 | --- | --- | --- | 514DA-4 HEX | 5442 |
| 0S | 16mm sq | 27937-62 | --- | --- | --- | 514DA-4 HEX | 5441 |
| 0P | 25mm sq | 27917-78 | --- | --- | --- | 514DA-4 HEX | 5442 |
| 0S | 25mm sq | 27937-78 | --- | --- | --- | 514DA-4 HEX | 8002 |
| 0P | 35mm sq | 27917-90 | --- | --- | --- | 514DA-0 HEX | 5442 |
| 0S | 35mm sq | 27937-90 | --- | --- | --- | 514DA-0 HEX | 5442 |
| 0P | 50mm sq | 27917-107 | --- | --- | --- | 514DA-0 HEX | 5442 |
| 0S | 50mm sq | 27937-107 | --- | --- | --- | 514DA-0 HEX | 5441 |
| 0P | 4 | 46646-0 | --- | --- | --- | 514DA-4 HEX | 5441-F |
| 0S | 4 | 47647-0 | --- | --- | --- | 514DA-4 HEX | 5441-F |
| 4/0 P | 2 | 47107-90 | --- | --- | --- | 514DA-0 HEX | 5498-1 |
| 4/0 S | 2 | 47114-90 | --- | --- | --- | 514DA-0 HEX | 5498-2 |
| 4/0 P | 0 (1/ 0) | 47107-115 | --- | --- | --- | 514DA-0 HEX | 5498-1 |
| 4/0 S | 0 (1/ 0) | 47114-115 | --- | --- | --- | 514DA-0 HEX | 5498-2 |
| 4/0 P | 2/0 | 47107-135 | --- | --- | --- | 514DA-2/0 HEX | 5498-1 |
| 4/0 S | 2/0 | 47114-135 | --- | --- | --- | 514DA-2/0 HEX | 5498-2 |
| 4/0 P | 70mm sq | 47107-144 | --- | --- | --- | 514DA-4/0 HEX | 5487 |
| 4/0 S | 70mm sq | 47114-144 | --- | --- | --- | 514DA-4/0 HEX | 5487 |
| 4/0 P | 95mm sq | 47107-155 | --- | --- | --- | 514DA-4/0 HEX | 5487 |
| 4/0 S | 95mm sq | 47114-155 | --- | --- | --- | 514DA-4/0 HEX | 5487 |
| 4/0 P | 4/0 | 47107-165 | --- | --- | --- | 514DA-4/0 HEX | 5487 |
| 4/0 S | 4/0 | 47114-165 | --- | --- | --- | 514DA-4/0 HEX | 5487 |

Turret

AF8 Manual CrimpTool

* Pneumatic tools, dies and locators are available from Pico Corporation. Phone +1-805-388-5510, Fax +1-805-482-4038

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

# TOOL KITS FOR CONNECTOR ASSEMBLY

## Deluxe Model Assembly Kit

The VEAM Model DMC 292 M is housed in a case with die cut poly-foam compartments to nest each tool. A complete set of connector assembly instructions is laminated in plastic and stored within the tool case for easy access.

| **DMC 292 M** Part Number | **Tool Kit Contents** Description |
|---|---|
| 1. AF8 | Crimp Tool Frame |
| 2. 616266 | Turret |
| 3. G125 | Inspection Gauge |
| 4. M2700-420 | Wrench |
| 5. 11-7345 | Insertion Tool |
| 6. 46736 | Insertion Tool |
| 7. A43240 | Removal Tool Kit |
| 8. 45-123 | Wire Cutter |
| 9. 45-092 | Wire Stripper |
| 10. TG70 | Mini Strap Wrench |
| 11. 140 | Assembly Manual CD |
| 12. 27977-16T50 | Guide Pin Size 16 |
| 13. 27977-12T50 | Guide Pin Size 12 |
| 14. H183BKF7240LNO | Carrying Case |

**⚠ WARNING**

Tooling & Handling: Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

Specifications and dimensions subject to change
Dimensions shown in mm.

## DSR Series

Double start, racheted coupling, electrical connectors with durable hard anodized finish.
Utilizes same insert arrangements and accessories as the CIR Series.

## CIR 290 Series

A circular bayonet connector for railroad applications. Power contacts, data bus communications, waterproof. IP 67

## CIR 295 Series

A bayonet circular connector for railroad applications. Rigid insulator, contacts with retention clips.

## VPT Series per MIL-C-26482

Miniature bayonet connectors with 1 to 61 solder or crimp contacts. Available in different classes, for numerous applications.

## CIR_ _FR Series

Rugged hard black anodized finish, available with extended coupling nuts for better gripping. Uses metal or composite backshells. Various types of strain relief accessories are available.

# VRPC

Lightweight, plastic connector for the Mass Transit, Offroad and Industrial markets that is qualified for the NFF 16-101, NFF 16-102 for fire and smoke resistance.

# Powerlock

Single pole power connectors, 400 A, 660 A. Waterproof. Color coded and keyed for three phases, neutral and earth.

# VSC

Threaded circular connector; 7 and 19 solder or crimp contacts. Socapex compatible. Ground contacts. Metal backshell and grounding feature.

# Snaplock

Single pole connectors for power applications up to 200 Amps. Typically used with cable 25/35/50 sq.mm.

Specifications and dimensions subject to change
Dimensions shown in mm.

## Product Safety Information

**1. MATERIAL CONTENT AND PHYSICAL FORM**

Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups.

a) Printed circuit types and low cost audio types which employ all plastic insulators and casings.

b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.

**⚠ CAUTION**

**2. FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD**

There is no fire hazard when the connector is correctly wired and used within the specified parameters.

Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionization and burning. Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local overheating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock. If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonization of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.

**3. HANDLING**

Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers.

Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

**4. DISPOSAL**

Incineration of certain materials may release noxious or even toxic fumes.

**5. APPLICATION**

Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog. Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.

**IMPORTANT GENERAL INFORMATION**

**(i)** Air and creepage paths/Operating voltage. The admissible operating voltages depend on the individual applications and the valid national and other applicable safety regulations. For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.

**(ii) Temperature**

All information given are temperature limits. The operation temperature depends on the individual application.

**(iii) Other important information**

Cannon continuously endeavors to improve their products. Therefore, Cannon products may deviate from the description, technical data and shape as shown in this catalog and data sheets.

ITT Interconnect Solutions, is a business unit of ITT Corporation which manufactures the highest quality products available in the marketplace; however these products are intended to be used in accordance with the specifications in this publication. Any use or application that deviates from the stated operating specifications is not recommended and may be unsafe. No information and data contained in this publication shall be construed to create any liability on the part of Cannon. Any new issue of this publication shall automatically invalidate and supersede any and all previous issues.

**Product Warranty**

A limited warranty applies to Cannon products. Please refer to www.ittcannon.com (General Terms of Sale) for the complete text of Cannon's applicable Terms and Conditions, including Warranty.

This publication is not to be construed as an offer. It is intended merely as an invitation to make an offer. By this publication, Cannon does not assume responsibility or any liability for any patent infringements or other rights of third parties which may result from its use.

Reprinting this publication is generally permitted, indicating the source. However, Cannon's prior written consent must be obtained in all cases. "Engineered for life" is a registered trademark of ITT Corporation ©2012. All other trademarks or registered trademarks are property of their respective owners. All date is subject to change without notice.

This document does not contain technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., App 2401 et. Seq.)

**ITT Interconnect Solutions**
Cannon, VEAM, BIW
Connector Systems

**Visit our website at**
www.ittcannon.com

**Global Design & Manufacturing**

**Customer Support**

## North America

**MEXICO - Cannon, VEAM**
Av. Libre Comercio s/n-
entre Calzada Industrial
Nuevo Nogales y Calzada del Raquet Club,
Parque Industrial Nuevo Nogales
phone: +52.631.3110050
fax: +52.631.3110060

**USA - Cannon**
666 East Dyer Road
Santa Ana, CA 92705
toll free: +1.800.854.3028
phone: +1.714.557.4700
fax: +1.714.628.2142

**USA - BIW Connector Systems**
500 Tesconi Circle
Santa Rosa, CA 95401
phone: +1.707.523.2300
fax: +1.707.523.3567

**USA - VEAM**
100 New Wood Road
Watertown, CT 06795
phone: +1.860.274.9681
fax: +1.860.274.4963

## Europe & Middle East

**FRANCE - Cannon, VEAM**
15, Boulevard Robert Thiboust
Serris, France 77700
phone: +33.1.60.04.93.93
fax: +33.1.60.04.93.90

**GERMANY - Cannon, VEAM**
ITT Cannon GmbH
Cannonstrasse 1
Weinstadt, 71384
phone: +49.7151.699.0
fax: +49.7151.699.217

**ITALY - Cannon, VEAM**
Corso Europa 41/43
Lainate (MI), Italy 20020
phone: +39.02938721
fax: +39.0293872300

**LEBANON - BIW Connector Systems**
P.O. Box 199
Jounieh
Lebanon
phone: +961.9.911.560
fax: +961.9.912.126

**UK - Cannon, VEAM**
Jays Close, Viables Estate
Basingstoke, RG22 4BA
phone: +44.1256.311200
fax: +44.1256.323356

## Asia

**CHINA - Cannon, VEAM**
Tuopandun Industrial Area,
Jinda Cheng, Xiner Village, Shajing Town,
Boan District, Shenzhen City,
Guangdong Province, China 518125
phone: +86.755.2726.7238
fax: +86.755.2726.7515

**HONG KONG - Cannon, VEAM**
Units 2405-6, 24/F, ING Tower
308 Des Voeux Road Central
Hong Kong
phone: +852.2732.2720
fax: +852.2732.2919

**INDIA - Cannon, VEAM**
ITT Corporation India Pvt Ltd
Money Chamber, Unit No. 202
#6, KH Road, Bangalore
560027
phone: +91 22 67843000
fax: +91 22 26783033

**JAPAN - Cannon, VEAM**
5-11-3, Hibarigaoka,
Zama-shi, Kanagawa, Japan 252-0003
phone: +81.462.57.2010
fax: +81.462.57.1680

**SINGAPORE - Cannon, VEAM**
10 Jalan Kilang #06-01
Singapore 159410
phone: +65.62763693 ext 232
fax: +65.62763685

ITT

ENGINEERED FOR LIFE

© 2013 ITT Corporation "Engineered for life" and "Cannon", "VEAM" and "BIW Connector Systems" are registered trademarks of ITT Corporation. Specification and other data are based on information available at the time of printing, and are subject to change without notice. Cover image courtesy of Shutterstock.